SEGES INNOVATION

STØTTET AF Mælkeafgiftsfonden

Report for Singlestep calving for HOL, RDC and JER

Singlestep calving is developed for data for May2024 official evaluation.

Calving data is included after 2000 (datacut). Pedigree is setup by the same program as used for the other singlestep traits.

Different tests have been done:

- Comparison of breeding values for EBVs with datacut and current traditional official EBVs
- Comparison of breeding values for singlestep and EBVs with datacut
- Comparison of breeding values for singlestep and current twostep genomic setup
- Comparison of breeding values for singlestep full and singlestep reduced model
- Comparison of breeding values for EBVs with datacut full and EBVs with datacut reduced model
- Legarra Reverter regression for singlestep breeding values
- Legarra Reverter regression for EBVs with datacut breeding values
- Mendelian sampling for singlestep breeding values
- Mendelian sampling for EBVs with datacut
- Mendelian sampling for current traditional official EBVs
- Comparison of reliabilities for singlestep and current traditional setup
- Comparison of reliabilities for singlestep and current twostep genomic setup
- Singlestep stability between two runs
- Interbull test for singlestep

Different groups of Nordic animals have been studied:

- Females with genotyped and without phenotype
- Females with genotyped and with phenotype
- Females without genotyped and with phenotype
- AI bulls with daughters with phenotype
- AI bulls without daughters with phenotype
- Nordic candidate bulls

For each group the mean, std and difference and correlation is shown by birth year. Furthermore, the distribution of differences is shown (d_ for number of animals and p_ for percentage of animals)

Only data from pure bred animals are included in the evaluations.

HOL datacut EBV (me) and official EBV (e) for nongenotyped females with phenotype

Obs	BYR	name	no	mean_me	mean_e	std_me	std_e	mean_dif	std_dif	corr
1	2000	dSB1	76825	92.6	93.3	6.6	6.6	-0.7	2.5	0.93
2	2001	dSB1	76787	92.3	93.1	6.8	6.8	-0.9	2.2	0.95
3	2002	dSB1	76803	92.7	93.6	6.9	6.9	-0.9	1.9	0.96
4	2003	dSB1	75616	92.6	93.6	6.8	6.9	-0.9	1.6	0.97
5	2004	dSB1	77210	93.6	94.5	6.5	6.6	-0.9	1.5	0.97
6	2005	dSB1	73641	93.8	94.8	6.7	6.8	-0.9	1.3	0.98
7	2006	dSB1	73645	94.9	95.8	6.8	6.9	-0.9	1.2	0.98
8	2007	dSB1	70895	93.8	94.6	6.6	6.6	-0.9	1.2	0.98
9	2008	dSB1	74871	94.7	95.6	6.4	6.5	-0.9	1.1	0.99
10	2009	dSB1	80043	94.3	95.2	6.5	6.5	-0.8	1.0	0.99
11	2010	dSB1	83273	95.5	96.2	6.3	6.3	-0.8	1.0	0.99
12	2011	dSB1	84212	96.0	96.7	6.1	6.1	-0.7	0.9	0.99
13	2012	dSB1	83335	96.8	97.4	5.9	5.9	-0.7	0.9	0.99
14	2013	dSB1	80231	96.8	97.4	5.6	5.6	-0.6	0.8	0.99
15	2014	dSB1	85753	96.8	97.3	5.3	5.3	-0.6	0.8	0.99
16	2015	dSB1	85658	97.1	97.5	5.6	5.6	-0.5	0.8	0.99
17	2016	dSB1	84643	98.7	99.0	5.7	5.7	-0.4	0.7	0.99
18	2017	dSB1	76823	99.3	99.5	5.8	5.8	-0.2	0.7	0.99
19	2018	dSB1	73334	99.3	99.4	5.5	5.5	-0.1	0.8	0.99
20	2019	dSB1	69277	99.1	99.2	5.8	5.7	-0.1	0.7	0.99
21	2020	dSB1	70837	99.7	99.6	5.2	5.1	0.0	0.7	0.99
22	2021	dSB1	72094	99.9	99.8	4.9	4.9	0.1	0.7	0.99
23	2022	dSB1	71882	100.0	99.8	4.8	4.8	0.1	0.7	0.99
24	2023	dSB1	71255	100.0	99.9	4.5	4.4	0.2	0.7	0.99
25	2024	dSB1	16910	100.7	100.5	4.1	4.1	0.2	0.7	0.98
26	2000	dCE1	61710	89.8	90.8	7.3	7.7	-1.0	2.5	0.95
27	2001	dCE1	61448	90.0	91.1	7.1	7.3	-1.1	2.2	0.95
28	2002	dCE1	61983	90.2	91.2	6.8	7.0	-1.0	1.7	0.97
29	2003	dCE1	62632	91.0	92.0	6.9	7.0	-0.9	1.3	0.98
30	2004	dCE1	66132	91.0	91.9	6.8	6.9	-0.9	1.2	0.99
31	2005	dCE1	63167	90.9	91.8	6.6	6.7	-0.8	1.0	0.99
32	2006	dCE1	63741	92.2	92.9	6.7	6.8	-0.7	0.9	0.99
33	2007	dCE1	63364	90.9	91.6	6.7	6.8	-0.7	0.8	0.99
34	2008	dCE1	67845	92.4	93.0	6.7	6.7	-0.6	0.7	0.99
35	2009	dCE1	72581	92.1	92.6	6.3	6.4	-0.6	0.7	0.99
36	2010	dCE1	75306	93.3	93.8	6.3	6.3	-0.5	0.6	0.99
37	2011	dCE1	75229	94.3	94.7	6.0	6.0	-0.5	0.6	0.99

HOL datacut EBV (me) and official EBV (e) for nongenotyped females with phenotype

Obs	BYR	name	no	mean_me	mean_e	std_me	std_e	mean_dif	std_dif	corr
38	2012	dCE1	73315	95.4	95.8	5.6	5.6	-0.4	0.5	1.00
39	2013	dCE1	68531	96.0	96.4	5.3	5.3	-0.4	0.5	1.00
40	2014	dCE1	72952	97.0	97.3	5.3	5.3	-0.4	0.5	1.00
41	2015	dCE1	72142	97.3	97.6	5.4	5.4	-0.3	0.5	1.00
42	2016	dCE1	73039	98.8	99.0	5.4	5.4	-0.2	0.4	1.00
43	2017	dCE1	65924	99.4	99.6	5.3	5.3	-0.2	0.4	1.00
44	2018	dCE1	62777	99.6	99.7	5.1	5.1	-0.1	0.4	1.00
45	2019	dCE1	58573	99.5	99.6	5.0	4.9	0.0	0.4	1.00
46	2020	dCE1	59602	99.8	99.8	4.8	4.7	0.0	0.4	1.00
47	2021	dCE1	61036	100.4	100.3	4.4	4.4	0.1	0.4	1.00
48	2022	dCE1	60383	100.7	100.6	4.2	4.1	0.1	0.4	1.00
49	2023	dCE1	59449	100.9	100.7	3.9	3.9	0.2	0.4	0.99
50	2024	dCE1	14086	101.1	100.9	3.8	3.8	0.2	0.4	0.99
51	2000	dCS1	57649	108.9	108.8	8.0	8.3	0.1	2.5	0.95
52	2001	dCS1	56842	109.3	109.3	8.0	8.2	-0.1	2.2	0.96
53	2002	dCS1	56855	110.0	110.0	7.7	7.8	0.0	1.7	0.98
54	2003	dCS1	57202	110.0	110.0	7.7	7.8	0.0	1.3	0.99
55	2004	dCS1	54647	109.9	109.9	7.5	7.6	0.1	1.2	0.99
56	2005	dCS1	51455	109.8	109.8	7.5	7.5	0.1	1.0	0.99
57	2006	dCS1	50698	108.5	108.3	7.5	7.6	0.1	0.9	0.99
58	2007	dCS1	46985	109.3	109.1	8.0	8.0	0.2	0.7	1.00
59	2008	dCS1	55030	107.3	107.1	7.8	7.8	0.2	0.7	1.00
60	2009	dCS1	60395	108.1	107.9	7.4	7.4	0.2	0.6	1.00
61	2010	dCS1	62366	106.8	106.6	7.6	7.6	0.2	0.5	1.00
62	2011	dCS1	61538	105.6	105.4	7.4	7.4	0.2	0.5	1.00
63	2012	dCS1	59382	104.8	104.6	7.3	7.3	0.2	0.4	1.00
64	2013	dCS1	55350	103.9	103.8	6.9	6.9	0.2	0.4	1.00
65	2014	dCS1	60107	102.5	102.4	7.1	7.1	0.2	0.4	1.00
66	2015	dCS1	60444	102.4	102.2	7.0	7.0	0.1	0.4	1.00
67	2016	dCS1	61515	101.2	101.1	6.9	6.9	0.1	0.4	1.00
68	2017	dCS1	55571	100.5	100.4	6.7	6.7	0.1	0.4	1.00
69	2018	dCS1	52573	100.1	100.1	6.7	6.7	0.0	0.4	1.00
70	2019	dCS1	48412	100.1	100.1	6.6	6.6	0.0	0.4	1.00
71	2020	dCS1	49283	99.8	99.9	6.4	6.4	0.0	0.4	1.00
72	2021	dCS1	51314	99.3	99.4	6.0	6.0	-0.1	0.4	1.00
73	2022	dCS1	51165	98.8	98.9	6.0	6.0	-0.1	0.4	1.00
74	2023	dCS1	50611	98.7	98.8	5.8	5.8	-0.1	0.4	1.00

HOL datacut EBV (me) and official EBV (e) for nongenotyped females with phenotype

Obs	BYR	name	no	mean_me	mean_e	std_me	std_e	mean_dif	std_dif	corr
75	2024	dCS1	11815	98.5	98.6	5.8	5.8	-0.1	0.4	1.00
76	2000	dSB2	119174	90.6	93.3	6.8	6.9	-2.7	3.4	0.88
77	2001	dSB2	118689	90.8	93.4	6.9	6.9	-2.7	3.2	0.89
78	2002	dSB2	117693	91.4	94.1	6.7	6.8	-2.7	3.1	0.90
79	2003	dSB2	114729	91.4	94.0	7.1	7.1	-2.6	2.9	0.92
80	2004	dSB2	117269	90.8	93.3	6.9	6.9	-2.4	2.6	0.93
81	2005	dSB2	115578	91.2	93.6	6.5	6.5	-2.4	2.4	0.93
82	2006	dSB2	116287	92.0	94.3	6.3	6.3	-2.3	2.2	0.94
83	2007	dSB2	113404	92.1	94.3	6.2	6.2	-2.2	2.2	0.94
84	2008	dSB2	116988	92.5	94.6	6.3	6.2	-2.1	2.1	0.94
85	2009	dSB2	124622	93.3	95.3	6.1	6.1	-2.0	2.0	0.95
86	2010	dSB2	126350	94.6	96.4	6.0	5.9	-1.8	2.0	0.94
87	2011	dSB2	125263	95.5	97.1	5.8	5.7	-1.6	1.9	0.94
88	2012	dSB2	125574	95.6	97.1	5.5	5.5	-1.5	1.9	0.94
89	2013	dSB2	125302	95.9	97.2	5.3	5.3	-1.4	1.8	0.94
90	2014	dSB2	122084	96.7	97.9	5.3	5.3	-1.2	1.8	0.95
91	2015	dSB2	119682	97.1	98.2	5.2	5.1	-1.1	1.7	0.95
92	2016	dSB2	116524	98.2	99.0	5.1	5.1	-0.8	1.6	0.95
93	2017	dSB2	105502	98.3	98.9	5.2	5.2	-0.6	1.7	0.95
94	2018	dSB2	98269	98.6	99.1	5.1	5.0	-0.4	1.6	0.95
95	2019	dSB2	95742	98.7	98.9	4.9	4.8	-0.3	1.6	0.95
96	2020	dSB2	93508	99.3	99.3	4.7	4.8	-0.1	1.8	0.93
97	2021	dSB2	92789	99.5	99.5	4.5	4.5	0.0	1.7	0.93
98	2022	dSB2	85566	99.9	99.7	4.4	4.5	0.2	1.7	0.93
99	2023	dSB2	80418	100.1	99.8	4.3	4.3	0.3	1.4	0.94
100	2024	dSB2	17778	100.2	99.9	4.2	4.2	0.3	1.4	0.95
101	2000	dCE2	93263	89.7	91.6	7.2	7.8	-1.9	3.2	0.91
102	2001	dCE2	92402	90.4	92.0	7.3	7.9	-1.6	2.9	0.93
103	2002	dCE2	92074	90.9	92.4	7.1	7.6	-1.5	2.7	0.94
104	2003	dCE2	93212	91.2	92.6	7.1	7.5	-1.4	2.3	0.95
105	2004	dCE2	93911	90.4	91.6	7.2	7.4	-1.2	1.9	0.97
106	2005	dCE2	92689	89.6	90.6	7.2	7.4	-1.1	1.6	0.98
107	2006	dCE2	94438	90.9	91.9	7.1	7.2	-1.0	1.3	0.98
108	2007	dCE2	97552	90.5	91.4	7.0	7.1	-0.9	1.1	0.99
109	2008	dCE2	102801	91.1	91.9	6.9	6.9	-0.8	1.0	0.99
110	2009	dCE2	109523	92.1	92.9	6.4	6.4	-0.8	0.9	0.99
111	2010	dCE2	111482	93.4	94.1	6.1	6.1	-0.7	0.8	0.99

HOL datacut EBV (me) and official EBV (e) for nongenotyped females with phenotype

Obs	BYR	name	no	mean_me	mean_e	std_me	std_e	mean_dif	std_dif	corr
112	2011	dCE2	109997	94.2	94.8	5.9	5.9	-0.6	0.7	0.99
113	2012	dCE2	108900	94.6	95.2	5.6	5.6	-0.6	0.6	0.99
114	2013	dCE2	106010	95.3	95.8	5.3	5.3	-0.5	0.6	0.99
115	2014	dCE2	102222	95.9	96.3	5.2	5.2	-0.4	0.5	0.99
116	2015	dCE2	99857	96.6	97.0	5.1	5.1	-0.4	0.5	0.99
117	2016	dCE2	98764	97.7	98.0	4.9	4.9	-0.3	0.5	0.99
118	2017	dCE2	89362	98.1	98.4	4.9	4.9	-0.2	0.5	0.99
119	2018	dCE2	82879	98.5	98.7	4.7	4.7	-0.2	0.5	0.99
120	2019	dCE2	80375	98.5	98.5	4.5	4.5	-0.1	0.5	0.99
121	2020	dCE2	77682	99.2	99.2	4.4	4.4	0.0	0.6	0.99
122	2021	dCE2	77150	99.8	99.7	4.2	4.2	0.1	0.5	0.99
123	2022	dCE2	71126	99.9	99.8	3.9	3.9	0.2	0.6	0.99
124	2023	dCE2	65812	100.0	99.8	3.7	3.7	0.2	0.5	0.99
125	2024	dCE2	14580	100.2	100.0	3.6	3.6	0.2	0.5	0.99
126	2000	dCS2	87793	113.9	113.1	7.9	8.4	0.8	2.7	0.95
127	2001	dCS2	86045	114.1	113.4	7.8	8.3	0.7	2.5	0.95
128	2002	dCS2	85070	113.4	112.6	7.7	8.1	0.8	2.3	0.96
129	2003	dCS2	85393	113.6	112.8	7.7	8.0	0.8	2.0	0.97
130	2004	dCS2	82457	114.3	113.5	7.9	8.2	0.8	1.7	0.98
131	2005	dCS2	80079	115.0	114.3	8.4	8.6	0.7	1.4	0.99
132	2006	dCS2	78963	113.4	112.7	8.3	8.4	0.7	1.1	0.99
133	2007	dCS2	74833	113.9	113.2	8.3	8.4	0.7	1.0	0.99
134	2008	dCS2	86097	112.6	112.0	8.2	8.3	0.6	0.9	0.99
135	2009	dCS2	92728	111.3	110.7	7.4	7.5	0.6	0.8	0.99
136	2010	dCS2	93473	109.3	108.8	7.6	7.6	0.5	0.7	1.00
137	2011	dCS2	91393	108.2	107.7	7.5	7.5	0.5	0.6	1.00
138	2012	dCS2	89414	107.3	106.9	7.4	7.5	0.4	0.6	1.00
139	2013	dCS2	86790	106.3	105.9	6.9	7.0	0.4	0.5	1.00
140	2014	dCS2	83748	105.3	105.0	7.1	7.1	0.3	0.5	1.00
141	2015	dCS2	82395	104.1	103.8	7.1	7.1	0.3	0.4	1.00
142	2016	dCS2	81502	103.1	102.9	6.9	6.9	0.2	0.4	1.00
143	2017	dCS2	73388	102.7	102.6	6.7	6.7	0.2	0.4	1.00
144	2018	dCS2	67654	102.6	102.5	6.5	6.5	0.1	0.4	1.00
145	2019	dCS2	65183	102.0	102.0	6.5	6.5	0.0	0.4	1.00
146	2020	dCS2	62378	100.9	100.9	6.4	6.4	0.0	0.4	1.00
147	2021	dCS2	61973	100.0	100.1	6.0	6.0	0.0	0.4	1.00
148	2022	dCS2	57077	99.7	99.8	6.0	6.0	-0.1	0.4	1.00

HOL datacut EBV (me) and official EBV (e) for nongenotyped females with phenotype

Obs	BYR	name	no	mean_me	mean_e	std_me	std_e	mean_dif	std_dif	corr
149	2023	dCS2	52540	99.5	99.6	5.8	5.8	-0.1	0.4	1.00
150	2024	dCS2	11462	98.9	99.0	5.9	5.9	-0.1	0.4	1.00
151	2000	mSB1	144735	90.0	90.8	5.7	6.0	-0.8	1.6	0.96
152	2001	mSB1	143291	91.0	91.7	5.5	5.7	-0.7	1.4	0.97
153	2002	mSB1	145119	90.6	91.2	5.7	5.9	-0.6	1.3	0.98
154	2003	mSB1	143517	91.7	92.2	5.1	5.3	-0.5	1.2	0.98
155	2004	mSB1	141954	91.1	91.5	5.7	5.9	-0.4	1.1	0.98
156	2005	mSB1	138927	92.3	92.6	6.2	6.3	-0.3	1.0	0.99
157	2006	mSB1	145205	92.8	93.1	6.1	6.1	-0.2	0.9	0.99
158	2007	mSB1	143716	93.9	94.1	6.0	6.0	-0.2	0.8	0.99
159	2008	mSB1	149632	93.6	93.8	5.7	5.7	-0.1	0.8	0.99
160	2009	mSB1	152497	93.3	93.4	5.7	5.8	-0.1	0.7	0.99
161	2010	mSB1	150671	92.6	92.6	5.6	5.6	-0.1	0.7	0.99
162	2011	mSB1	150685	93.4	93.5	5.5	5.5	0.0	0.6	0.99
163	2012	mSB1	152716	94.1	94.2	5.5	5.5	0.0	0.6	0.99
164	2013	mSB1	148867	95.3	95.2	5.6	5.6	0.0	0.5	1.00
165	2014	mSB1	149425	95.3	95.3	5.2	5.2	0.0	0.5	1.00
166	2015	mSB1	142311	96.0	96.0	5.2	5.2	0.0	0.5	1.00
167	2016	mSB1	135894	96.8	96.8	5.0	4.9	0.0	0.5	1.00
168	2017	mSB1	118957	97.2	97.2	5.4	5.3	0.0	0.5	1.00
169	2018	mSB1	114086	98.6	98.6	5.0	5.0	0.0	0.5	1.00
170	2019	mSB1	109617	99.0	99.0	4.6	4.6	0.0	0.5	0.99
171	2020	mSB1	105304	99.7	99.7	4.6	4.6	0.0	0.5	0.99
172	2021	mSB1	96801	99.6	99.7	4.3	4.3	-0.1	0.5	0.99
173	2022	mSB1	17481	100.3	100.4	4.0	4.0	-0.1	0.5	0.99
174	2000	mCE1	118557	85.3	87.3	7.3	7.4	-2.0	2.1	0.96
175	2001	mCE1	117640	86.3	88.1	7.3	7.4	-1.8	1.8	0.97
176	2002	mCE1	124419	86.8	88.4	7.5	7.6	-1.6	1.6	0.98
177	2003	mCE1	123252	87.4	88.9	7.7	7.7	-1.4	1.3	0.98
178	2004	mCE1	123836	87.6	88.9	7.2	7.2	-1.3	1.2	0.99
179	2005	mCE1	124468	88.9	90.0	7.1	7.1	-1.2	1.0	0.99
180	2006	mCE1	131340	89.9	90.9	6.8	6.8	-1.0	0.9	0.99
181	2007	mCE1	129583	90.7	91.6	6.7	6.7	-0.9	0.8	0.99
182	2008	mCE1	134333	90.5	91.3	6.6	6.6	-0.8	0.7	0.99
183	2009	mCE1	136054	91.0	91.7	6.2	6.2	-0.7	0.7	0.99
184	2010	mCE1	131786	90.8	91.4	6.1	6.1	-0.6	0.6	0.99
185	2011	mCE1	128449	91.7	92.1	5.7	5.7	-0.5	0.6	0.99

HOL datacut EBV (me) and official EBV (e) for nongenotyped females with phenotype

Obs	BYR	name	no	mean_me	mean_e	std_me	std_e	mean_dif	std_dif	corr
186	2012	mCE1	129229	92.4	92.7	5.6	5.6	-0.4	0.6	0.99
187	2013	mCE1	125063	93.5	93.8	5.9	5.8	-0.3	0.6	1.00
188	2014	mCE1	128969	94.1	94.3	5.3	5.2	-0.2	0.5	0.99
189	2015	mCE1	122083	95.0	95.1	5.2	5.1	-0.1	0.6	0.99
190	2016	mCE1	116300	95.9	96.0	5.1	5.0	-0.1	0.6	0.99
191	2017	mCE1	100916	96.7	96.7	5.1	5.1	0.0	0.6	0.99
192	2018	mCE1	96030	97.9	97.9	4.7	4.6	0.0	0.6	0.99
193	2019	mCE1	91703	98.9	98.9	4.6	4.6	0.0	0.7	0.99
194	2020	mCE1	87361	99.6	99.6	4.4	4.4	0.0	0.6	0.99
195	2021	mCE1	79907	99.8	99.8	4.0	4.0	0.0	0.6	0.99
196	2022	mCE1	14280	100.4	100.4	3.9	3.9	-0.1	0.6	0.99
197	2000	mCS1	109427	92.7	92.4	9.7	9.6	0.4	2.7	0.96
198	2001	mCS1	106020	93.4	92.9	8.8	8.9	0.5	2.3	0.97
199	2002	mCS1	102522	93.5	93.1	8.7	8.7	0.4	2.0	0.97
200	2003	mCS1	100310	93.7	93.3	9.1	9.1	0.4	1.7	0.98
201	2004	mCS1	97383	92.6	92.3	8.9	9.0	0.3	1.5	0.99
202	2005	mCS1	93501	91.6	91.3	9.0	9.1	0.3	1.3	0.99
203	2006	mCS1	107795	91.7	91.4	8.7	8.7	0.3	1.1	0.99
204	2007	mCS1	106387	92.9	92.7	7.5	7.6	0.3	1.0	0.99
205	2008	mCS1	110350	93.2	93.0	7.7	7.7	0.2	0.9	0.99
206	2009	mCS1	111274	93.8	93.5	7.4	7.4	0.2	0.8	0.99
207	2010	mCS1	106520	93.1	92.9	7.2	7.2	0.2	0.7	1.00
208	2011	mCS1	103767	93.4	93.2	7.5	7.5	0.2	0.7	1.00
209	2012	mCS1	106239	94.2	94.0	7.2	7.2	0.2	0.6	1.00
210	2013	mCS1	104320	94.7	94.5	6.7	6.7	0.2	0.6	1.00
211	2014	mCS1	107502	95.3	95.1	6.6	6.6	0.2	0.6	1.00
212	2015	mCS1	101233	96.1	95.9	6.4	6.4	0.2	0.7	0.99
213	2016	mCS1	95445	96.5	96.3	6.6	6.6	0.2	0.7	0.99
214	2017	mCS1	82185	97.7	97.5	6.3	6.3	0.2	0.7	0.99
215	2018	mCS1	78606	97.2	97.0	6.2	6.1	0.2	0.8	0.99
216	2019	mCS1	75495	98.3	98.2	6.1	6.1	0.1	0.8	0.99
217	2020	mCS1	71674	99.3	99.3	5.8	5.8	0.1	0.8	0.99
218	2021	mCS1	65925	99.7	99.7	5.5	5.5	0.0	0.7	0.99
219	2022	mCS1	11751	101.0	101.1	5.6	5.5	0.0	0.7	0.99
220	2000	mSB2	112764	88.3	87.1	6.1	6.8	1.2	2.6	0.92
221	2001	mSB2	113120	88.6	87.5	6.3	6.9	1.1	2.4	0.94
222	2002	mSB2	113899	88.9	87.8	6.7	7.2	1.1	2.3	0.95

HOL datacut EBV (me) and official EBV (e) for nongenotyped females with phenotype

Obs	BYR	name	no	mean_me	mean_e	std_me	std_e	mean_dif	std_dif	corr
223	2003	mSB2	115049	90.3	89.2	6.2	6.7	1.2	2.1	0.95
224	2004	mSB2	115817	90.1	89.0	6.8	7.2	1.1	2.0	0.96
225	2005	mSB2	117821	91.2	90.1	6.7	7.2	1.1	2.0	0.96
226	2006	mSB2	124514	91.7	90.6	6.5	6.9	1.1	1.9	0.96
227	2007	mSB2	120444	92.3	91.2	6.2	6.6	1.1	1.8	0.96
228	2008	mSB2	122247	92.1	91.0	5.9	6.3	1.1	1.8	0.96
229	2009	mSB2	125605	92.6	91.6	5.7	6.1	1.0	1.7	0.96
230	2010	mSB2	123383	91.3	90.4	6.3	6.5	0.9	1.4	0.98
231	2011	mSB2	119659	92.8	92.0	6.0	6.2	0.9	1.4	0.98
232	2012	mSB2	119697	94.1	93.3	5.5	5.7	0.8	1.3	0.97
233	2013	mSB2	114988	94.4	93.6	5.5	5.7	0.8	1.2	0.98
234	2014	mSB2	113337	94.9	94.2	5.3	5.5	0.7	1.1	0.98
235	2015	mSB2	108261	95.3	94.6	5.5	5.6	0.6	1.0	0.98
236	2016	mSB2	104397	96.2	95.7	5.3	5.4	0.5	0.9	0.99
237	2017	mSB2	93878	97.4	97.0	5.3	5.3	0.4	0.9	0.99
238	2018	mSB2	85612	98.5	98.2	5.1	5.1	0.2	0.8	0.99
239	2019	mSB2	76941	99.1	99.0	5.1	5.1	0.1	0.8	0.99
240	2020	mSB2	63758	99.8	99.9	4.9	5.0	-0.1	0.8	0.99
241	2021	mSB2	10154	99.4	99.6	4.7	4.7	-0.1	0.7	0.99
242	2022	mSB2	4	.	.	.	.	.	.	0.98
243	2000	mCE2	94789	85.7	85.1	7.4	7.6	0.6	2.5	0.95
244	2001	mCE2	95340	85.5	85.0	8.3	8.3	0.5	2.2	0.97
245	2002	mCE2	97351	86.4	85.8	8.5	8.4	0.5	1.9	0.98
246	2003	mCE2	101124	87.5	86.9	8.3	8.2	0.6	1.6	0.98
247	2004	mCE2	103967	88.0	87.5	8.1	7.9	0.5	1.4	0.98
248	2005	mCE2	106636	89.1	88.6	7.9	7.7	0.6	1.2	0.99
249	2006	mCE2	112802	90.0	89.4	7.3	7.2	0.6	1.1	0.99
250	2007	mCE2	108820	90.5	89.9	7.0	6.8	0.6	1.0	0.99
251	2008	mCE2	109615	90.4	89.9	6.8	6.6	0.6	0.9	0.99
252	2009	mCE2	111294	91.2	90.6	6.6	6.4	0.6	0.8	0.99
253	2010	mCE2	107806	90.7	90.1	6.5	6.3	0.6	1.0	0.99
254	2011	mCE2	104316	91.8	91.2	6.2	6.0	0.6	0.9	0.99
255	2012	mCE2	105114	93.0	92.4	5.9	5.8	0.6	1.0	0.99
256	2013	mCE2	101567	93.7	93.1	5.9	5.8	0.6	0.9	0.99
257	2014	mCE2	100093	94.5	93.9	5.5	5.4	0.6	1.0	0.98
258	2015	mCE2	94662	95.0	94.5	5.3	5.3	0.6	1.1	0.98
259	2016	mCE2	91042	96.1	95.7	5.2	5.2	0.5	1.0	0.98

HOL datacut EBV (me) and official EBV (e) for nongenotyped females with phenotype

Obs	BYR	name	no	mean_me	mean_e	std_me	std_e	mean_dif	std_dif	corr
260	2017	mCE2	80763	96.9	96.5	4.9	4.9	0.4	1.1	0.98
261	2018	mCE2	73036	97.9	97.7	4.7	4.7	0.2	1.0	0.98
262	2019	mCE2	64835	99.1	99.0	4.6	4.6	0.1	0.8	0.98
263	2020	mCE2	51973	99.5	99.6	4.3	4.3	0.0	0.8	0.98
264	2021	mCE2	8236	99.5	99.6	4.2	4.2	-0.1	0.8	0.98
265	2022	mCE2	4	.	.	.	.	.	.	0.97
266	2000	mCS2	86257	97.0	93.8	8.6	8.8	3.2	2.5	0.96
267	2001	mCS2	83924	97.4	94.4	8.3	8.5	3.0	2.2	0.97
268	2002	mCS2	83730	97.9	95.1	8.5	8.7	2.8	1.9	0.98
269	2003	mCS2	84942	97.6	94.9	8.6	8.7	2.7	1.6	0.98
270	2004	mCS2	86339	95.8	93.2	8.4	8.4	2.6	1.4	0.99
271	2005	mCS2	90448	95.3	92.8	8.3	8.2	2.5	1.3	0.99
272	2006	mCS2	95546	94.7	92.4	8.2	8.1	2.4	1.1	0.99
273	2007	mCS2	91047	95.7	93.4	7.4	7.3	2.3	1.0	0.99
274	2008	mCS2	91222	95.7	93.6	7.6	7.5	2.2	1.0	0.99
275	2009	mCS2	92180	96.2	94.1	7.4	7.3	2.1	0.9	0.99
276	2010	mCS2	88656	94.2	92.4	7.2	7.2	1.8	0.7	0.99
277	2011	mCS2	85715	95.0	93.3	7.4	7.4	1.7	0.7	1.00
278	2012	mCS2	86708	95.3	93.8	7.1	7.0	1.5	0.7	1.00
279	2013	mCS2	83265	95.4	94.0	6.4	6.4	1.4	0.7	0.99
280	2014	mCS2	81691	95.7	94.5	6.6	6.6	1.2	0.6	1.00
281	2015	mCS2	76522	96.9	95.8	6.5	6.5	1.1	0.7	0.99
282	2016	mCS2	73329	96.8	95.9	6.3	6.2	0.9	0.6	0.99
283	2017	mCS2	64929	97.9	97.2	6.2	6.2	0.7	0.7	0.99
284	2018	mCS2	58694	98.3	97.7	6.3	6.2	0.5	0.7	0.99
285	2019	mCS2	52482	98.5	98.3	5.8	5.8	0.3	0.7	0.99
286	2020	mCS2	41936	99.8	99.7	5.3	5.3	0.0	0.7	0.99
287	2021	mCS2	6742	99.4	99.5	5.4	5.4	-0.1	0.7	0.99
288	2000	brth	76825	91.7	92.8	6.6	6.8	-1.1	2.5	0.93
289	2001	brth	76787	91.5	92.7	6.7	6.8	-1.2	2.3	0.94
290	2002	brth	76803	92.0	93.1	6.7	6.8	-1.1	1.9	0.96
291	2003	brth	75616	92.2	93.4	6.7	6.9	-1.2	1.7	0.97
292	2004	brth	77210	92.8	93.9	6.5	6.7	-1.1	1.6	0.97
293	2005	brth	73641	92.9	94.0	6.6	6.6	-1.1	1.4	0.98
294	2006	brth	73645	93.8	94.9	6.6	6.7	-1.1	1.3	0.98
295	2007	brth	70895	92.9	93.9	6.2	6.3	-0.9	1.3	0.98
296	2008	brth	74871	93.9	94.9	6.2	6.3	-0.9	1.2	0.98

HOL datacut EBV (me) and official EBV (e) for nongenotyped females with phenotype

Obs	BYR	name	no	mean_me	mean_e	std_me	std_e	mean_dif	std_dif	corr
297	2009	brth	80043	93.7	94.5	6.2	6.2	-0.9	1.2	0.98
298	2010	brth	83273	94.9	95.7	6.0	6.1	-0.8	1.1	0.98
299	2011	brth	84212	95.6	96.3	5.9	5.9	-0.7	1.1	0.98
300	2012	brth	83335	96.4	97.1	5.6	5.6	-0.7	1.0	0.98
301	2013	brth	80231	96.5	97.2	5.2	5.2	-0.7	1.0	0.98
302	2014	brth	85753	96.9	97.5	5.0	5.0	-0.6	0.9	0.98
303	2015	brth	85658	97.1	97.6	5.1	5.1	-0.5	0.9	0.98
304	2016	brth	84643	98.5	99.0	5.2	5.2	-0.4	0.9	0.99
305	2017	brth	76823	99.1	99.4	5.4	5.3	-0.3	0.9	0.99
306	2018	brth	73334	99.4	99.6	5.1	5.1	-0.2	0.9	0.98
307	2019	brth	69277	99.2	99.3	5.3	5.2	-0.1	0.9	0.99
308	2020	brth	70837	99.7	99.7	4.8	4.8	0.0	0.8	0.99
309	2021	brth	72094	100.0	99.9	4.5	4.5	0.1	0.9	0.98
310	2022	brth	71882	100.2	100.0	4.4	4.4	0.2	0.8	0.98
311	2023	brth	71255	100.3	100.1	4.1	4.1	0.2	0.8	0.98
312	2024	brth	16910	100.8	100.6	3.8	3.8	0.3	0.9	0.98
313	2000	calv	144735	88.2	88.2	5.8	6.2	0.0	1.8	0.96
314	2001	calv	143291	89.0	89.0	5.6	6.0	0.1	1.6	0.96
315	2002	calv	145119	88.9	88.7	6.0	6.3	0.1	1.5	0.97
316	2003	calv	143517	90.2	89.9	5.4	5.7	0.3	1.4	0.97
317	2004	calv	141954	89.7	89.4	6.0	6.2	0.3	1.2	0.98
318	2005	calv	138927	91.0	90.6	6.4	6.5	0.3	1.1	0.98
319	2006	calv	145205	91.6	91.2	6.2	6.3	0.3	1.1	0.99
320	2007	calv	143716	92.5	92.2	6.0	6.2	0.3	1.0	0.99
321	2008	calv	149632	92.3	91.9	5.7	5.9	0.4	0.9	0.99
322	2009	calv	152497	92.3	91.9	5.6	5.7	0.4	0.9	0.99
323	2010	calv	150671	91.4	91.0	5.7	5.7	0.4	0.8	0.99
324	2011	calv	150685	92.5	92.1	5.5	5.6	0.4	0.7	0.99
325	2012	calv	152716	93.5	93.1	5.3	5.4	0.4	0.7	0.99
326	2013	calv	148867	94.4	94.0	5.4	5.5	0.3	0.7	0.99
327	2014	calv	149425	94.6	94.3	5.1	5.1	0.3	0.6	0.99
328	2015	calv	142311	95.3	95.0	5.1	5.1	0.3	0.6	0.99
329	2016	calv	135894	96.2	96.0	4.9	4.9	0.2	0.6	0.99
330	2017	calv	118957	96.9	96.8	5.1	5.1	0.2	0.6	0.99
331	2018	calv	114086	98.3	98.2	4.9	4.9	0.1	0.6	0.99
332	2019	calv	109617	98.9	98.9	4.6	4.6	0.0	0.6	0.99
333	2020	calv	105304	99.6	99.7	4.6	4.6	-0.1	0.6	0.99

HOL datacut EBV (me) and official EBV (e) for nongenotyped females with phenotype

Obs	BYR	name	no	mean_me	mean_e	std_me	std_e	mean_dif	std_dif	corr
334	2021	calv	96801	99.4	99.6	4.2	4.2	-0.2	0.6	0.99
335	2022	calv	17481	100.1	100.3	4.0	4.0	-0.2	0.6	0.99

HOL datacut EBV (me) and official EBV (e) for nongenotyped females with phenotype

Obs	diff	d_brth	d_calv	p_brth	p_calv
1	-41	.	.	.	.
2	-40	.	.	.	.
3	-39	.	.	.	.
4	-37	.	.	.	.
5	-36	.	.	.	.
6	-35	.	.	.	.
7	-34	.	.	.	.
8	-33	.	.	.	.
9	-32	.	.	.	.
10	-30	.	3	.	0
11	-29	.	3	.	0
12	-28	.	.	.	.
13	-27	.	3	.	0
14	-26	.	1	.	0
15	-25	.	4	.	0
16	-24	.	1	.	0
17	-23	.	2	.	0
18	-22	.	.	.	.
19	-21	.	.	.	.
20	-20	.	2	.	0
21	-19	1	1	0	0
22	-18	.	2	.	0
23	-17	.	2	.	0
24	-16	.	4	.	0
25	-15	1	5	0	0
26	-14	1	10	0	0
27	-13	1	19	0	0
28	-12	7	27	0	0
29	-11	29	80	0	0
30	-10	71	166	0	0
31	-9	197	477	0	0
32	-8	582	1201	0	0
33	-7	1457	2304	0	0
34	-6	3489	3283	0	0
35	-5	8992	5201	0	0
36	-4	23356	11704	1	0
37	-3	67166	28097	4	1

HOL datacut EBV (me) and official EBV (e) for nongenotyped females with phenotype

Obs	diff	d_brth	d_calv	p_brth	p_calv
38	-2	252772	75381	14	2
39	-1	700966	320224	38	11
40	0	584846	1413621	31	46
41	1	133343	1001566	7	33
42	2	43901	141696	2	5
43	3	22236	26380	1	1
44	4	10271	6796	1	0
45	5	5091	2131	0	0
46	6	2768	703	0	0
47	7	1660	216	0	0
48	8	1029	59	0	0
49	9	602	21	0	0
50	10	336	8	0	0
51	11	262	4	0	0
52	12	197	.	0	.
53	13	63	.	0	.
54	14	43	.	0	.
55	15	18	.	0	.
56	16	17	.	0	.
57	17	2	.	0	.
58	18	4	.	0	.
59	19	3	.	0	.
60	20	7	.	0	.
61	21	2	.	0	.
62	22	11	.	0	.
63	23	13	.	0	.
64	24	7	.	0	.
65	25	4	.	0	.
66	26	5	.	0	.
67	27	1	.	0	.
68	28	.	.	.	.
69	29	1	.	0	.
70	30	1	.	0	.
71	31	.	.	.	.
72	32	.	.	.	.
73	33	1	.	0	.
74	34	1	.	0	.

HOL datacut EBV (me) and official EBV (e) for nongenotyped females with phenotype

Obs	diff	d_brth	d_calv	p_brth	p_calv
75	35	.	.	.	.
76	36	.	.	.	.
77	37	1	.	0	.
78	38	.	.	.	.
79	39	.	.	.	.
80	40	1	.	0	.
81	41	2	.	0	.
82	42	2	.	0	.
83	43	.	.	.	.
84	44	2	.	0	.
85	45	5	.	0	.
86	46	2	.	0	.
87	47	2	.	0	.
88	48	1	.	0	.
89	52	1	.	0	.
90	54	.	.	.	.
91	56	.	.	.	.
92	61	.	.	.	.
93	64	.	.	.	.
94	66	.	.	.	.
95	68	.	.	.	.
96	70	.	.	.	.
97	71	.	.	.	.
98	72	.	.	.	.
99	78	.	.	.	.
100	119	.	.	.	.
101	125	.	.	.	.
102	129	.	.	.	.
103	130	.	.	.	.
104	131	.	.	.	.
105	132	.	.	.	.
106	133	.	.	.	.
107	134	.	.	.	.
108	135	.	.	.	.
109	136	.	.	.	.
110	137	.	.	.	.
111	138	.	.	.	.

HOL datacut EBV (me) and official EBV (e) for nongenotyped females with phenotype

Obs	diff	d_brth	d_calv	p_brth	p_calv
112	140	.	.	.	.
113	141	.	.	.	.
114	142	.	.	.	.
115	143	.	.	.	.
116	144	.	.	.	.
117	146	.	.	.	.

HOL datacut EBV (me) and official EBV (e) for nongenotyped females with phenotype

Obs	diff	d_dSB1	d_dCE1	d_dCS1	d_dSB2	d_dCE2	d_dCS2
1	-41	.	.	.	.	.	.
2	-40	.	.	.	.	.	.
3	-39	.	.	.	.	.	.
4	-37	.	.	.	.	.	.
5	-36	.	.	.	.	.	.
6	-35	.	.	.	.	.	.
7	-34	.	.	.	.	.	.
8	-33	.	.	.	.	.	.
9	-32	.	.	.	.	.	.
10	-30	.	.	.	.	.	.
11	-29	.	.	.	.	.	.
12	-28	.	.	.	.	.	.
13	-27	.	.	.	.	.	.
14	-26	.	.	.	.	.	.
15	-25	.	.	.	.	.	.
16	-24	.	.	.	.	.	.
17	-23	.	.	.	.	.	.
18	-22	.	.	.	.	.	.
19	-21	.	.	.	.	.	.
20	-20	.	.	.	.	.	.
21	-19	.	.	.	.	.	.
22	-18	1	.	1	1	1	3
23	-17	.	.	.	.	2	3
24	-16	.	.	.	12	8	1
25	-15	1	.	.	15	12	2
26	-14	1	1	.	55	25	3
27	-13	2	2	2	140	42	6
28	-12	3	14	5	366	78	9
29	-11	11	19	17	1041	182	24
30	-10	45	59	42	2490	465	53
31	-9	114	161	79	5541	1190	148
32	-8	319	365	203	12043	3041	323
33	-7	856	918	441	23546	7016	894
34	-6	2197	2292	1082	45350	14713	2057
35	-5	6153	5723	2569	90877	28050	4355
36	-4	16548	14453	5736	192137	50488	9012
37	-3	49513	35906	13097	404750	94612	18113

HOL datacut EBV (me) and official EBV (e) for nongenotyped females with phenotype

Obs	diff	d_dSB1	d_dCE1	d_dCS1	d_dSB2	d_dCE2	d_dCS2
38	-2	192725	100994	35424	640183	212392	39606
39	-1	725747	491064	135337	613170	689090	136740
40	0	669654	806963	849441	379975	943279	930702
41	1	118857	100999	234734	106582	137205	520402
42	2	44418	23011	38505	60558	37430	132853
43	3	19954	8306	13181	37853	17630	56731
44	4	8798	3255	5215	25732	8880	26400
45	5	4068	1431	2316	22000	4933	11931
46	6	2318	587	1066	12937	3137	5447
47	7	1399	234	452	7773	1829	2358
48	8	896	83	166	6286	1074	1003
49	9	525	44	54	4564	601	392
50	10	379	29	19	3406	317	131
51	11	149	7	7	2340	165	66
52	12	58	6	10	1234	68	34
53	13	29	6	.	517	41	13
54	14	22	2	1	349	11	6
55	15	16	1	1	201	13	4
56	16	5	2	.	178	5	1
57	17	4	1	.	150	3	2
58	18	6	2	1	125	1	.
59	19	12	1	.	80	2	.
60	20	17	5	.	31	1	.
61	21	4	.	.	20	3	.
62	22	6	1	.	27	3	.
63	23	.	.	.	14	4	.
64	24	1	.	.	12	2	.
65	25	1	.	.	5	.	.
66	26	.	.	.	7	.	.
67	27	1	.	.	6	.	.
68	28	.	.	.	2	.	.
69	29	.	.	.	5	.	.
70	30	.	.	.	5	.	.
71	31	1	.	.	2	.	.
72	32	1	.	.	2	.	.
73	33	1	.	.	3	1	.
74	34	.	.	.	7	1	.

HOL datacut EBV (me) and official EBV (e) for nongenotyped females with phenotype

Obs	diff	d_dSB1	d_dCE1	d_dCS1	d_dSB2	d_dCE2	d_dCS2
75	35	3	.	.	14	.	.
76	36	1	.	.	3	1	.
77	37	2	.	.	1	1	.
78	38	4	.	.	.	1	.
79	39	2	.	.	2	2	.
80	40	3	.	.	3	.	.
81	41	.	.	.	1	3	.
82	42	1	.	.	4	2	.
83	43	.	.	.	1	.	.
84	44	.	.	.	5	.	.
85	45	1	.	.	2	2	.
86	46	.	.	.	.	5	.
87	47	.	.	.	.	.	.
88	48	.	.	.	.	.	.
89	52	.	.	.	.	.	.
90	54	.	.	.	1	.	.
91	56	.	.	.	1	.	.
92	61	.	.	.	1	.	.
93	64	.	.	.	1	.	.
94	66	.	.	.	2	.	.
95	68	.	.	.	3	.	.
96	70	.	.	.	7	.	.
97	71	.	.	.	3	.	.
98	72	.	.	.	2	.	.
99	78	.	.	.	2	.	.
100	119	.	.	.	1	.	.
101	125	.	.	.	1	.	.
102	129	.	.	.	1	.	.
103	130	.	.	.	1	.	.
104	131	.	.	.	1	.	.
105	132	.	.	.	2	.	.
106	133	.	.	.	1	.	.
107	134	.	.	.	1	.	.
108	135	.	.	.	1	.	.
109	136	.	.	.	1	.	.
110	137	.	.	.	2	.	.
111	138	.	.	.	1	.	.

HOL datacut EBV (me) and official EBV (e) for nongenotyped females with phenotype

Obs	diff	d_dSB1	d_dCE1	d_dCS1	d_dSB2	d_dCE2	d_dCS2
112	140	.	.	.	1	.	.
113	141	.	.	.	1	.	.
114	142	.	.	.	1	.	.
115	143	.	.	.	1	.	.
116	144	.	.	.	1	.	.
117	146	.	.	.	1	.	.

HOL datacut EBV (me) and official EBV (e) for nongenotyped females with phenotype

Obs	diff	d_mSB1	d_mCE1	d_mCS1	d_mSB2	d_mCE2	d_mCS2
1	-41	.	.	.	3	.	.
2	-40	.	.	.	4	.	.
3	-39	.	.	.	2	.	.
4	-37	.	.	.	3	.	.
5	-36	.	.	.	1	.	.
6	-35	.	.	.	2	.	.
7	-34	.	.	.	2	.	.
8	-33	.	.	.	1	.	.
9	-32	.	.	.	2	.	.
10	-30	.	1	.	1	.	.
11	-29	.	1	.	2	1	.
12	-28	.	.	.	1	.	.
13	-27	.	.	.	.	.	.
14	-26	.	.	.	3	1	.
15	-25	.	1	.	.	3	.
16	-24	1	2	.	2	3	.
17	-23	4	2	.	4	.	.
18	-22	2	3	.	2	2	.
19	-21	3	1	.	2	1	.
20	-20	3	.	.	8	1	.
21	-19	2	.	.	8	.	.
22	-18	2	.	.	16	1	.
23	-17	.	.	.	21	.	.
24	-16	2	1	.	38	.	.
25	-15	2	6	.	68	3	.
26	-14	3	2	2	150	5	.
27	-13	5	9	3	268	14	.
28	-12	8	23	6	651	15	.
29	-11	31	76	11	1016	29	1
30	-10	83	173	31	1907	78	3
31	-9	223	557	66	2874	141	8
32	-8	692	1376	190	3977	429	14
33	-7	1684	3501	554	6083	938	39
34	-6	3312	8514	1546	10357	2024	95
35	-5	5924	19669	3963	12894	4329	220
36	-4	14924	44993	9928	18701	8671	689
37	-3	43926	108692	23625	34286	18754	1734

HOL datacut EBV (me) and official EBV (e) for nongenotyped females with phenotype

Obs	diff	d_mSB1	d_mCE1	d_mCS1	d_mSB2	d_mCE2	d_mCS2
38	-2	133622	272896	59933	57814	45312	4720
39	-1	495687	810085	252012	117642	153197	27822
40	0	1932722	1224534	1158860	420508	814461	197645
41	1	371576	91011	417487	879679	717589	508898
42	2	28736	17784	123537	546616	157803	503816
43	3	5882	5966	55762	141301	56554	241652
44	4	1639	2650	26238	38869	21252	106404
45	5	477	2081	12609	12807	9744	48379
46	6	158	486	4964	4251	7225	24302
47	7	53	298	2416	1593	2654	11231
48	8	14	97	1033	541	1886	5067
49	9	4	29	485	202	858	2160
50	10	2	12	203	102	546	859
51	11	.	4	100	33	332	335
52	12	.	6	37	15	163	118
53	13	.	9	16	11	102	57
54	14	.	6	9	3	32	22
55	15	.	.	4	1	8	12
56	16	.	1	.	.	9	2
57	17	.	.	.	.	1	.
58	18	.	.	1	1	2	.
59	19	.	.	.	.	4	.
60	20	.	.	.	.	3	.
61	21	.	.	.	.	.	.
62	22	.	.	.	.	3	.
63	23	.	.	.	.	2	.
64	24	.	.	.	.	.	.
65	25	.	.	.	.	.	.
66	26	.	.	.	.	.	.
67	27	.	.	.	.	.	.
68	28	.	.	.	.	.	.
69	29	.	.	.	.	.	.
70	30	.	.	.	.	.	.
71	31	.	.	.	.	.	.
72	32	.	.	.	.	.	.
73	33	.	.	.	.	.	.
74	34	.	.	.	.	.	.

HOL datacut EBV (me) and official EBV (e) for nongenotyped females with phenotype

Obs	diff	d_mSB1	d_mCE1	d_mCS1	d_mSB2	d_mCE2	d_mCS2
75	35	.	.	.	.	.	.
76	36	.	.	.	.	.	.
77	37	.	.	.	.	.	.
78	38	.	.	.	.	.	.
79	39	.	.	.	.	.	.
80	40	.	.	.	.	.	.
81	41	.	.	.	.	.	.
82	42	.	.	.	.	.	.
83	43	.	.	.	.	.	.
84	44	.	.	.	.	.	.
85	45	.	.	.	.	.	.
86	46	.	.	.	.	.	.
87	47	.	.	.	.	.	.
88	48	.	.	.	.	.	.
89	52	.	.	.	.	.	.
90	54	.	.	.	.	.	.
91	56	.	.	.	.	.	.
92	61	.	.	.	.	.	.
93	64	.	.	.	.	.	.
94	66	.	.	.	.	.	.
95	68	.	.	.	.	.	.
96	70	.	.	.	.	.	.
97	71	.	.	.	.	.	.
98	72	.	.	.	.	.	.
99	78	.	.	.	.	.	.
100	119	.	.	.	.	.	.
101	125	.	.	.	.	.	.
102	129	.	.	.	.	.	.
103	130	.	.	.	.	.	.
104	131	.	.	.	.	.	.
105	132	.	.	.	.	.	.
106	133	.	.	.	.	.	.
107	134	.	.	.	.	.	.
108	135	.	.	.	.	.	.
109	136	.	.	.	.	.	.
110	137	.	.	.	.	.	.
111	138	.	.	.	.	.	.

HOL datacut EBV (me) and official EBV (e) for nongenotyped females with phenotype

Obs	diff	d_mSB1	d_mCE1	d_mCS1	d_mSB2	d_mCE2	d_mCS2
112	140	.	.	.	.	.	.
113	141	.	.	.	.	.	.
114	142	.	.	.	.	.	.
115	143	.	.	.	.	.	.
116	144	.	.	.	.	.	.
117	146	.	.	.	.	.	.

HOL datacut EBV (me) and official EBV (e) for nongenotyped females with phenotype

Obs	diff	p_dSB1	p_dCE1	p_dCS1	p_dSB2	p_dCE2	p_dCS2
1	-41	.	.	.	.	.	.
2	-40	.	.	.	.	.	.
3	-39	.	.	.	.	.	.
4	-37	.	.	.	.	.	.
5	-36	.	.	.	.	.	.
6	-35	.	.	.	.	.	.
7	-34	.	.	.	.	.	.
8	-33	.	.	.	.	.	.
9	-32	.	.	.	.	.	.
10	-30	.	.	.	.	.	.
11	-29	.	.	.	.	.	.
12	-28	.	.	.	.	.	.
13	-27	.	.	.	.	.	.
14	-26	.	.	.	.	.	.
15	-25	.	.	.	.	.	.
16	-24	.	.	.	.	.	.
17	-23	.	.	.	.	.	.
18	-22	.	.	.	.	.	.
19	-21	.	.	.	.	.	.
20	-20	.	.	.	.	.	.
21	-19	.	.	.	.	.	.
22	-18	0	.	0	0	0	0
23	-17	.	.	.	.	0	0
24	-16	.	.	.	0	0	0
25	-15	0	.	.	0	0	0
26	-14	0	0	.	0	0	0
27	-13	0	0	0	0	0	0
28	-12	0	0	0	0	0	0
29	-11	0	0	0	0	0	0
30	-10	0	0	0	0	0	0
31	-9	0	0	0	0	0	0
32	-8	0	0	0	0	0	0
33	-7	0	0	0	1	0	0
34	-6	0	0	0	2	1	0
35	-5	0	0	0	3	1	0
36	-4	1	1	0	7	2	0
37	-3	3	2	1	15	4	1

HOL datacut EBV (me) and official EBV (e) for nongenotyped females with phenotype

Obs	diff	p_dSB1	p_dCE1	p_dCS1	p_dSB2	p_dCE2	p_dCS2
38	-2	10	6	3	24	9	2
39	-1	39	31	10	23	31	7
40	0	36	51	63	14	42	49
41	1	6	6	18	4	6	27
42	2	2	1	3	2	2	7
43	3	1	1	1	1	1	3
44	4	0	0	0	1	0	1
45	5	0	0	0	1	0	1
46	6	0	0	0	0	0	0
47	7	0	0	0	0	0	0
48	8	0	0	0	0	0	0
49	9	0	0	0	0	0	0
50	10	0	0	0	0	0	0
51	11	0	0	0	0	0	0
52	12	0	0	0	0	0	0
53	13	0	0	.	0	0	0
54	14	0	0	0	0	0	0
55	15	0	0	0	0	0	0
56	16	0	0	.	0	0	0
57	17	0	0	.	0	0	0
58	18	0	0	0	0	0	.
59	19	0	0	.	0	0	.
60	20	0	0	.	0	0	.
61	21	0	.	.	0	0	.
62	22	0	0	.	0	0	.
63	23	.	.	.	0	0	.
64	24	0	.	.	0	0	.
65	25	0	.	.	0	.	.
66	26	.	.	.	0	.	.
67	27	0	.	.	0	.	.
68	28	.	.	.	0	.	.
69	29	.	.	.	0	.	.
70	30	.	.	.	0	.	.
71	31	0	.	.	0	.	.
72	32	0	.	.	0	.	.
73	33	0	.	.	0	0	.
74	34	.	.	.	0	0	.

HOL datacut EBV (me) and official EBV (e) for nongenotyped females with phenotype

Obs	diff	p_dSB1	p_dCE1	p_dCS1	p_dSB2	p_dCE2	p_dCS2
75	35	0	.	.	0	.	.
76	36	0	.	.	0	0	.
77	37	0	.	.	0	0	.
78	38	0	.	.	.	0	.
79	39	0	.	.	0	0	.
80	40	0	.	.	0	.	.
81	41	.	.	.	0	0	.
82	42	0	.	.	0	0	.
83	43	.	.	.	0	.	.
84	44	.	.	.	0	.	.
85	45	0	.	.	0	0	.
86	46	.	.	.	.	0	.
87	47	.	.	.	.	.	.
88	48	.	.	.	.	.	.
89	52	.	.	.	.	.	.
90	54	.	.	.	0	.	.
91	56	.	.	.	0	.	.
92	61	.	.	.	0	.	.
93	64	.	.	.	0	.	.
94	66	.	.	.	0	.	.
95	68	.	.	.	0	.	.
96	70	.	.	.	0	.	.
97	71	.	.	.	0	.	.
98	72	.	.	.	0	.	.
99	78	.	.	.	0	.	.
100	119	.	.	.	0	.	.
101	125	.	.	.	0	.	.
102	129	.	.	.	0	.	.
103	130	.	.	.	0	.	.
104	131	.	.	.	0	.	.
105	132	.	.	.	0	.	.
106	133	.	.	.	0	.	.
107	134	.	.	.	0	.	.
108	135	.	.	.	0	.	.
109	136	.	.	.	0	.	.
110	137	.	.	.	0	.	.
111	138	.	.	.	0	.	.

HOL datacut EBV (me) and official EBV (e) for nongenotyped females with phenotype

Obs	diff	p_dSB1	p_dCE1	p_dCS1	p_dSB2	p_dCE2	p_dCS2
112	140	.	.	.	0	.	.
113	141	.	.	.	0	.	.
114	142	.	.	.	0	.	.
115	143	.	.	.	0	.	.
116	144	.	.	.	0	.	.
117	146	.	.	.	0	.	.

HOL datacut EBV (me) and official EBV (e) for nongenotyped females with phenotype

Obs	diff	p_mSB1	p_mCE1	p_mCS1	p_mSB2	p_mCE2	p_mCS2
1	-41	.	.	.	0	.	.
2	-40	.	.	.	0	.	.
3	-39	.	.	.	0	.	.
4	-37	.	.	.	0	.	.
5	-36	.	.	.	0	.	.
6	-35	.	.	.	0	.	.
7	-34	.	.	.	0	.	.
8	-33	.	.	.	0	.	.
9	-32	.	.	.	0	.	.
10	-30	.	0	.	0	.	.
11	-29	.	0	.	0	0	.
12	-28	.	.	.	0	.	.
13	-27	.	.	.	.	.	.
14	-26	.	.	.	0	0	.
15	-25	.	0	.	.	0	.
16	-24	0	0	.	0	0	.
17	-23	0	0	.	0	.	.
18	-22	0	0	.	0	0	.
19	-21	0	0	.	0	0	.
20	-20	0	.	.	0	0	.
21	-19	0	.	.	0	.	.
22	-18	0	.	.	0	0	.
23	-17	.	.	.	0	.	.
24	-16	0	0	.	0	.	.
25	-15	0	0	.	0	0	.
26	-14	0	0	0	0	0	.
27	-13	0	0	0	0	0	.
28	-12	0	0	0	0	0	.
29	-11	0	0	0	0	0	0
30	-10	0	0	0	0	0	0
31	-9	0	0	0	0	0	0
32	-8	0	0	0	0	0	0
33	-7	0	0	0	0	0	0
34	-6	0	0	0	0	0	0
35	-5	0	1	0	1	0	0
36	-4	0	2	0	1	0	0
37	-3	1	4	1	1	1	0

HOL datacut EBV (me) and official EBV (e) for nongenotyped females with phenotype

Obs	diff	p_mSB1	p_mCE1	p_mCS1	p_mSB2	p_mCE2	p_mCS2
38	-2	4	10	3	2	2	0
39	-1	16	31	12	5	8	2
40	0	64	47	54	18	40	12
41	1	12	3	19	38	35	30
42	2	1	1	6	24	8	30
43	3	0	0	3	6	3	14
44	4	0	0	1	2	1	6
45	5	0	0	1	1	0	3
46	6	0	0	0	0	0	1
47	7	0	0	0	0	0	1
48	8	0	0	0	0	0	0
49	9	0	0	0	0	0	0
50	10	0	0	0	0	0	0
51	11	.	0	0	0	0	0
52	12	.	0	0	0	0	0
53	13	.	0	0	0	0	0
54	14	.	0	0	0	0	0
55	15	.	.	0	0	0	0
56	16	.	0	.	.	0	0
57	17	.	.	.	.	0	.
58	18	.	.	0	0	0	.
59	19	.	.	.	.	0	.
60	20	.	.	.	.	0	.
61	21	.	.	.	.	.	.
62	22	.	.	.	.	0	.
63	23	.	.	.	.	0	.
64	24	.	.	.	.	.	.
65	25	.	.	.	.	.	.
66	26	.	.	.	.	.	.
67	27	.	.	.	.	.	.
68	28	.	.	.	.	.	.
69	29	.	.	.	.	.	.
70	30	.	.	.	.	.	.
71	31	.	.	.	.	.	.
72	32	.	.	.	.	.	.
73	33	.	.	.	.	.	.
74	34	.	.	.	.	.	.

HOL datacut EBV (me) and official EBV (e) for nongenotyped females with phenotype

Obs	diff	p_mSB1	p_mCE1	p_mCS1	p_mSB2	p_mCE2	p_mCS2
75	35	.	.	.	.	.	.
76	36	.	.	.	.	.	.
77	37	.	.	.	.	.	.
78	38	.	.	.	.	.	.
79	39	.	.	.	.	.	.
80	40	.	.	.	.	.	.
81	41	.	.	.	.	.	.
82	42	.	.	.	.	.	.
83	43	.	.	.	.	.	.
84	44	.	.	.	.	.	.
85	45	.	.	.	.	.	.
86	46	.	.	.	.	.	.
87	47	.	.	.	.	.	.
88	48	.	.	.	.	.	.
89	52	.	.	.	.	.	.
90	54	.	.	.	.	.	.
91	56	.	.	.	.	.	.
92	61	.	.	.	.	.	.
93	64	.	.	.	.	.	.
94	66	.	.	.	.	.	.
95	68	.	.	.	.	.	.
96	70	.	.	.	.	.	.
97	71	.	.	.	.	.	.
98	72	.	.	.	.	.	.
99	78	.	.	.	.	.	.
100	119	.	.	.	.	.	.
101	125	.	.	.	.	.	.
102	129	.	.	.	.	.	.
103	130	.	.	.	.	.	.
104	131	.	.	.	.	.	.
105	132	.	.	.	.	.	.
106	133	.	.	.	.	.	.
107	134	.	.	.	.	.	.
108	135	.	.	.	.	.	.
109	136	.	.	.	.	.	.
110	137	.	.	.	.	.	.
111	138	.	.	.	.	.	.

HOL datacut EBV (me) and official EBV (e) for nongenotyped females with phenotype

Obs	diff	p_mSB1	p_mCE1	p_mCS1	p_mSB2	p_mCE2	p_mCS2
112	140	.	.	.	.	.	.
113	141	.	.	.	.	.	.
114	142	.	.	.	.	.	.
115	143	.	.	.	.	.	.
116	144	.	.	.	.	.	.
117	146	.	.	.	.	.	.

HOL datacut EBV (me) and official EBV (e) for nordic AI bulls with minimum 15 offspring

Obs	BYR	name	no	mean_noff	std_noff	mean_me	mean_e	std_me	std_e	mean_dif	std_dif	corr
1	2000	dSB1	375	326	1975	89.6	91.0	10.0	9.8	-1.4	1.1	0.99
2	2001	dSB1	438	286	1855	86.7	88.0	10.0	10.0	-1.3	1.1	0.99
3	2002	dSB1	397	310	2570	88.5	89.7	10.0	10.0	-1.2	0.8	1.00
4	2003	dSB1	353	227	918	89.1	90.2	10.1	10.1	-1.1	0.8	1.00
5	2004	dSB1	359	576	2951	92.3	93.3	9.6	9.6	-1.0	0.7	1.00
6	2005	dSB1	353	287	1908	93.0	94.0	10.1	10.0	-1.1	0.7	1.00
7	2006	dSB1	395	169	947	92.6	93.6	9.2	9.2	-1.0	0.6	1.00
8	2007	dSB1	307	148	255	92.4	93.3	8.9	8.9	-0.9	0.5	1.00
9	2008	dSB1	251	303	911	94.7	95.5	8.8	8.9	-0.8	0.6	1.00
10	2009	dSB1	224	487	1666	96.1	96.8	9.9	9.9	-0.7	0.5	1.00
11	2010	dSB1	193	874	2924	97.9	98.6	7.8	7.8	-0.7	0.5	1.00
12	2011	dSB1	154	462	1080	97.7	98.3	7.1	7.1	-0.6	0.4	1.00
13	2012	dSB1	170	732	1354	97.5	98.0	8.3	8.4	-0.5	0.4	1.00
14	2013	dSB1	151	761	1481	100.6	101.0	7.2	7.1	-0.4	0.4	1.00
15	2014	dSB1	114	1203	1565	99.8	100.0	7.2	7.1	-0.2	0.4	1.00
16	2015	dSB1	82	1845	2364	101.6	101.7	7.6	7.5	-0.1	0.3	1.00
17	2016	dSB1	65	1613	2133	99.7	99.7	7.8	7.8	0.0	0.3	1.00
18	2017	dSB1	66	1798	2329	100.3	100.2	8.2	8.2	0.1	0.3	1.00
19	2018	dSB1	78	1472	2300	100.4	100.3	6.4	6.4	0.2	0.3	1.00
20	2019	dSB1	56	1572	2374	101.0	100.9	6.4	6.4	0.1	0.3	1.00
21	2020	dSB1	53	1413	1973	101.1	100.9	6.1	6.1	0.2	0.3	1.00
22	2021	dSB1	42	877	1250	102.3	102.1	5.2	5.2	0.2	0.4	1.00
23	2000	dCE1	343	315	1966	88.3	89.0	10.7	10.7	-0.6	0.7	1.00
24	2001	dCE1	412	259	1792	85.9	86.4	10.2	10.3	-0.5	0.8	1.00
25	2002	dCE1	397	271	2310	87.8	88.3	9.9	10.0	-0.5	0.7	1.00
26	2003	dCE1	353	199	855	87.9	88.4	9.8	9.9	-0.5	0.6	1.00
27	2004	dCE1	359	521	2727	90.7	91.2	8.9	9.0	-0.5	0.6	1.00
28	2005	dCE1	353	253	1707	90.6	91.0	10.0	10.0	-0.5	0.5	1.00
29	2006	dCE1	394	149	854	92.2	92.7	9.7	9.7	-0.5	0.5	1.00
30	2007	dCE1	306	136	240	92.2	92.6	9.1	9.1	-0.4	0.4	1.00
31	2008	dCE1	251	274	834	93.9	94.3	9.3	9.3	-0.3	0.4	1.00
32	2009	dCE1	224	434	1481	95.8	96.2	9.3	9.3	-0.4	0.4	1.00
33	2010	dCE1	193	768	2585	96.9	97.2	7.6	7.6	-0.3	0.3	1.00
34	2011	dCE1	154	402	946	97.1	97.3	7.2	7.2	-0.3	0.3	1.00
35	2012	dCE1	170	636	1194	98.2	98.4	7.8	7.8	-0.1	0.3	1.00
36	2013	dCE1	151	669	1328	100.7	100.8	6.7	6.8	-0.1	0.3	1.00
37	2014	dCE1	114	1072	1414	99.8	99.8	6.9	6.9	0.0	0.3	1.00

HOL datacut EBV (me) and official EBV (e) for nordic AI bulls with minimum 15 offspring

Obs	BYR	name	no	mean_noff	std_noff	mean_me	mean_e	std_me	std_e	mean_dif	std_dif	corr
38	2015	dCE1	82	1640	2124	101.5	101.5	4.8	4.8	0.0	0.3	1.00
39	2016	dCE1	65	1426	1907	100.9	100.8	5.6	5.7	0.1	0.3	1.00
40	2017	dCE1	66	1583	2063	101.1	100.9	5.8	5.7	0.1	0.3	1.00
41	2018	dCE1	78	1288	2026	100.9	100.7	4.8	4.7	0.2	0.3	1.00
42	2019	dCE1	56	1378	2083	101.9	101.6	4.6	4.6	0.2	0.3	1.00
43	2020	dCE1	52	1258	1729	102.9	102.7	3.5	3.5	0.3	0.3	1.00
44	2021	dCE1	42	763	1088	101.5	101.1	4.5	4.4	0.3	0.3	1.00
45	2000	dCS1	269	243	1829	113.4	113.0	12.8	12.8	0.3	0.8	1.00
46	2001	dCS1	298	235	1721	116.1	116.0	10.2	10.2	0.2	0.7	1.00
47	2002	dCS1	272	220	1759	114.0	113.7	10.8	10.8	0.3	0.5	1.00
48	2003	dCS1	241	177	744	113.3	113.0	10.3	10.2	0.3	0.4	1.00
49	2004	dCS1	238	504	2319	111.3	111.1	10.5	10.4	0.2	0.5	1.00
50	2005	dCS1	236	219	1421	111.7	111.4	11.8	11.8	0.3	0.4	1.00
51	2006	dCS1	279	112	663	108.7	108.5	10.4	10.4	0.2	0.3	1.00
52	2007	dCS1	203	129	225	109.3	109.1	10.4	10.5	0.3	0.4	1.00
53	2008	dCS1	173	272	719	106.7	106.5	10.4	10.5	0.2	0.3	1.00
54	2009	dCS1	159	425	1324	103.7	103.5	9.8	9.8	0.2	0.3	1.00
55	2010	dCS1	143	684	2018	102.3	102.2	9.0	9.0	0.1	0.3	1.00
56	2011	dCS1	115	335	744	102.0	101.8	8.2	8.2	0.2	0.3	1.00
57	2012	dCS1	136	526	901	101.4	101.2	8.5	8.5	0.1	0.3	1.00
58	2013	dCS1	114	569	992	99.6	99.4	8.5	8.5	0.1	0.3	1.00
59	2014	dCS1	103	865	1115	99.4	99.3	8.3	8.3	0.1	0.3	1.00
60	2015	dCS1	81	1158	1590	97.4	97.3	6.9	6.9	0.1	0.3	1.00
61	2016	dCS1	63	999	1413	98.2	98.3	7.3	7.3	0.0	0.3	1.00
62	2017	dCS1	66	1087	1556	97.7	97.7	7.7	7.8	0.0	0.3	1.00
63	2018	dCS1	75	929	1503	98.6	98.8	6.8	6.7	-0.1	0.3	1.00
64	2019	dCS1	53	1020	1525	97.1	97.3	5.6	5.6	-0.1	0.3	1.00
65	2020	dCS1	46	1022	1312	96.5	96.6	5.2	5.2	-0.1	0.4	1.00
66	2021	dCS1	27	900	916	97.1	97.2	6.0	5.9	-0.1	0.4	1.00
67	2000	dSB2	375	508	1990	89.6	93.1	10.6	10.1	-3.5	1.3	0.99
68	2001	dSB2	438	583	2470	86.1	89.6	10.7	10.3	-3.4	1.3	0.99
69	2002	dSB2	397	578	3404	88.3	91.7	9.9	9.5	-3.4	1.0	1.00
70	2003	dSB2	353	583	2554	88.7	91.9	10.7	10.3	-3.2	1.0	1.00
71	2004	dSB2	360	950	4209	90.2	93.1	10.4	9.9	-2.9	1.2	0.99
72	2005	dSB2	355	547	2592	91.3	94.0	10.0	9.6	-2.7	1.0	1.00
73	2006	dSB2	395	428	1900	92.3	94.9	9.6	9.1	-2.6	0.9	1.00
74	2007	dSB2	306	370	668	92.0	94.3	9.2	8.9	-2.4	0.8	1.00

HOL datacut EBV (me) and official EBV (e) for nordic AI bulls with minimum 15 offspring

Obs	BYR	name	no	mean_noff	std_noff	mean_me	mean_e	std_me	std_e	mean_dif	std_dif	corr
75	2008	dSB2	251	627	1515	94.3	96.4	9.1	8.7	-2.2	0.8	1.00
76	2009	dSB2	224	773	1959	96.6	98.4	8.6	8.2	-1.7	0.7	1.00
77	2010	dSB2	193	1308	3577	97.5	99.1	7.6	7.4	-1.6	0.6	1.00
78	2011	dSB2	155	955	1868	97.7	99.1	7.4	7.1	-1.4	0.6	1.00
79	2012	dSB2	171	1329	2260	97.7	98.9	8.3	8.0	-1.2	0.5	1.00
80	2013	dSB2	151	1324	2257	98.9	99.9	7.0	6.7	-1.0	0.5	1.00
81	2014	dSB2	114	1875	2196	100.1	100.7	7.0	6.7	-0.7	0.5	1.00
82	2015	dSB2	83	2742	3068	100.4	100.7	6.4	6.2	-0.3	0.7	0.99
83	2016	dSB2	66	2598	3067	100.0	100.2	6.6	6.4	-0.2	0.4	1.00
84	2017	dSB2	66	2675	2755	100.9	100.8	7.2	6.9	0.0	0.5	1.00
85	2018	dSB2	78	2404	2884	100.7	100.6	5.7	5.5	0.1	0.4	1.00
86	2019	dSB2	56	2336	2940	101.0	100.7	5.6	5.4	0.3	0.4	1.00
87	2020	dSB2	58	1719	2456	101.5	101.2	6.5	6.2	0.3	0.5	1.00
88	2021	dSB2	44	1227	1621	102.3	101.7	5.5	5.2	0.5	0.4	1.00
89	2000	dCE2	343	488	1955	89.1	90.0	10.9	11.0	-0.9	0.6	1.00
90	2001	dCE2	406	535	2372	87.1	87.9	10.2	10.3	-0.7	0.6	1.00
91	2002	dCE2	397	488	2894	89.0	89.7	10.3	10.3	-0.7	0.6	1.00
92	2003	dCE2	352	514	2407	89.8	90.5	9.8	9.8	-0.7	0.6	1.00
93	2004	dCE2	360	844	3854	91.0	91.6	8.7	8.7	-0.7	0.5	1.00
94	2005	dCE2	355	476	2263	90.9	91.5	9.8	9.9	-0.6	0.4	1.00
95	2006	dCE2	395	372	1672	92.0	92.6	8.9	8.9	-0.6	0.4	1.00
96	2007	dCE2	306	335	606	92.6	93.1	8.5	8.5	-0.5	0.5	1.00
97	2008	dCE2	251	563	1377	93.9	94.3	8.4	8.5	-0.5	0.4	1.00
98	2009	dCE2	224	683	1713	95.5	95.9	9.2	9.2	-0.4	0.3	1.00
99	2010	dCE2	193	1137	3129	97.1	97.5	7.4	7.4	-0.4	0.4	1.00
100	2011	dCE2	155	832	1635	96.6	96.9	5.9	5.9	-0.2	0.4	1.00
101	2012	dCE2	171	1148	1971	97.9	98.1	6.7	6.8	-0.2	0.3	1.00
102	2013	dCE2	151	1156	1998	99.0	99.1	6.0	6.0	-0.1	0.3	1.00
103	2014	dCE2	114	1652	1949	99.9	99.9	5.7	5.8	-0.1	0.3	1.00
104	2015	dCE2	82	2441	2707	101.2	101.1	4.2	4.2	0.1	0.3	1.00
105	2016	dCE2	66	2280	2692	100.6	100.5	4.7	4.7	0.1	0.3	1.00
106	2017	dCE2	66	2346	2396	100.7	100.5	4.7	4.7	0.2	0.3	1.00
107	2018	dCE2	78	2094	2514	100.8	100.5	4.2	4.2	0.3	0.3	1.00
108	2019	dCE2	56	2029	2550	102.2	101.9	4.1	4.2	0.4	0.3	1.00
109	2020	dCE2	57	1518	2141	101.9	101.5	3.1	3.1	0.4	0.3	1.00
110	2021	dCE2	44	1062	1400	100.3	99.8	4.6	4.7	0.4	0.4	1.00
111	2000	dCS2	271	372	1612	114.6	114.3	12.4	12.6	0.3	0.5	1.00

HOL datacut EBV (me) and official EBV (e) for nordic AI bulls with minimum 15 offspring

Obs	BYR	name	no	mean_noff	std_noff	mean_me	mean_e	std_me	std_e	mean_dif	std_dif	corr
112	2001	dCS2	300	521	2260	117.3	116.9	10.1	10.2	0.4	0.4	1.00
113	2002	dCS2	272	441	2060	114.9	114.6	10.9	11.0	0.4	0.4	1.00
114	2003	dCS2	242	521	2132	113.5	113.2	10.1	10.2	0.3	0.4	1.00
115	2004	dCS2	240	816	3149	112.6	112.3	10.9	11.0	0.3	0.4	1.00
116	2005	dCS2	239	436	1834	112.5	112.2	11.3	11.4	0.3	0.3	1.00
117	2006	dCS2	280	341	1322	109.9	109.6	10.3	10.4	0.3	0.3	1.00
118	2007	dCS2	203	352	468	110.3	110.1	10.4	10.5	0.3	0.3	1.00
119	2008	dCS2	173	594	1173	107.7	107.5	10.1	10.2	0.2	0.3	1.00
120	2009	dCS2	159	663	1388	104.7	104.5	9.6	9.6	0.2	0.3	1.00
121	2010	dCS2	143	1000	2255	102.8	102.7	8.3	8.4	0.2	0.3	1.00
122	2011	dCS2	116	727	1261	102.2	102.1	8.3	8.3	0.2	0.3	1.00
123	2012	dCS2	137	949	1400	102.1	102.0	7.8	7.8	0.1	0.3	1.00
124	2013	dCS2	114	990	1469	100.3	100.2	7.5	7.5	0.1	0.3	1.00
125	2014	dCS2	104	1267	1397	100.1	100.1	7.5	7.5	0.0	0.3	1.00
126	2015	dCS2	80	1679	1853	98.7	98.8	6.5	6.5	-0.1	0.3	1.00
127	2016	dCS2	64	1547	1802	99.2	99.3	7.1	7.1	-0.1	0.3	1.00
128	2017	dCS2	66	1552	1563	97.7	97.9	7.4	7.5	-0.2	0.3	1.00
129	2018	dCS2	77	1418	1694	98.4	98.7	7.3	7.4	-0.2	0.3	1.00
130	2019	dCS2	54	1399	1653	97.3	97.5	6.5	6.6	-0.2	0.3	1.00
131	2020	dCS2	50	1155	1490	96.3	96.4	6.2	6.2	-0.1	0.3	1.00
132	2021	dCS2	37	940	1043	97.1	97.2	7.3	7.3	-0.2	0.5	1.00
133	2000	mSB1	376	307	1522	86.8	86.5	10.6	10.7	0.3	0.8	1.00
134	2001	mSB1	438	328	1548	89.8	89.6	9.2	9.3	0.2	0.8	1.00
135	2002	mSB1	398	333	2370	89.7	89.5	9.8	9.8	0.2	0.6	1.00
136	2003	mSB1	352	295	1224	91.2	91.0	9.0	9.1	0.2	0.5	1.00
137	2004	mSB1	359	573	2706	91.4	91.1	9.2	9.2	0.3	0.6	1.00
138	2005	mSB1	353	321	1781	92.7	92.5	9.6	9.6	0.2	0.6	1.00
139	2006	mSB1	395	224	1006	94.4	94.1	7.7	7.6	0.2	0.5	1.00
140	2007	mSB1	308	187	322	93.5	93.3	8.3	8.3	0.2	0.5	1.00
141	2008	mSB1	251	343	972	93.7	93.5	8.7	8.7	0.2	0.5	1.00
142	2009	mSB1	224	464	1351	94.2	94.0	7.4	7.3	0.2	0.6	1.00
143	2010	mSB1	193	836	2597	96.3	96.2	7.8	7.8	0.2	0.5	1.00
144	2011	mSB1	155	504	1062	96.2	96.0	8.0	8.0	0.1	0.4	1.00
145	2012	mSB1	171	722	1279	96.7	96.5	7.3	7.3	0.2	0.4	1.00
146	2013	mSB1	151	739	1345	98.0	97.8	6.9	6.9	0.2	0.4	1.00
147	2014	mSB1	113	1115	1349	97.8	97.6	8.8	8.8	0.1	0.4	1.00
148	2015	mSB1	83	1650	2045	100.1	100.0	6.7	6.7	0.1	0.3	1.00

HOL datacut EBV (me) and official EBV (e) for nordic AI bulls with minimum 15 offspring

Obs	BYR	name	no	mean_noff	std_noff	mean_me	mean_e	std_me	std_e	mean_dif	std_dif	corr
149	2016	mSB1	66	1583	2004	100.0	99.9	6.2	6.2	0.0	0.4	1.00
150	2017	mSB1	66	1667	1985	102.1	102.1	6.1	6.1	0.0	0.3	1.00
151	2018	mSB1	78	1347	1936	100.8	100.8	6.6	6.6	-0.1	0.3	1.00
152	2019	mSB1	53	746	1273	101.6	101.8	4.7	4.7	-0.2	0.3	1.00
153	2000	mCE1	376	284	1451	84.9	85.7	11.3	11.1	-0.8	0.8	1.00
154	2001	mCE1	438	296	1431	86.8	87.6	10.2	10.0	-0.8	0.7	1.00
155	2002	mCE1	398	295	2049	87.7	88.3	9.9	9.8	-0.7	0.6	1.00
156	2003	mCE1	352	269	1128	87.8	88.3	10.1	10.0	-0.5	0.6	1.00
157	2004	mCE1	359	512	2421	90.3	90.8	8.9	8.9	-0.4	0.6	1.00
158	2005	mCE1	353	284	1535	91.1	91.5	8.9	8.9	-0.4	0.5	1.00
159	2006	mCE1	395	200	871	92.6	92.9	8.8	8.8	-0.3	0.5	1.00
160	2007	mCE1	307	171	288	93.9	94.1	7.6	7.5	-0.2	0.5	1.00
161	2008	mCE1	251	305	864	92.5	92.7	8.1	8.0	-0.2	0.5	1.00
162	2009	mCE1	224	407	1185	94.0	94.1	7.6	7.5	0.0	0.6	1.00
163	2010	mCE1	193	733	2302	96.3	96.3	7.7	7.6	0.0	0.5	1.00
164	2011	mCE1	155	445	948	96.8	96.8	7.7	7.6	0.1	0.4	1.00
165	2012	mCE1	171	640	1140	96.4	96.3	6.6	6.6	0.1	0.4	1.00
166	2013	mCE1	151	653	1194	97.9	97.8	6.3	6.2	0.1	0.5	1.00
167	2014	mCE1	113	984	1201	99.0	98.9	7.5	7.4	0.1	0.4	1.00
168	2015	mCE1	83	1450	1805	100.3	100.2	5.8	5.7	0.1	0.4	1.00
169	2016	mCE1	66	1387	1763	101.1	101.2	5.5	5.4	-0.1	0.4	1.00
170	2017	mCE1	66	1456	1727	103.3	103.3	5.5	5.4	0.0	0.3	1.00
171	2018	mCE1	78	1160	1672	102.0	102.1	5.3	5.3	-0.1	0.3	1.00
172	2019	mCE1	53	645	1099	101.6	101.8	4.4	4.4	-0.2	0.4	1.00
173	2000	mCS1	271	234	1430	94.1	94.1	11.3	11.3	0.0	1.1	1.00
174	2001	mCS1	300	294	1435	90.8	90.7	11.1	11.0	0.1	0.9	1.00
175	2002	mCS1	272	244	1457	90.7	90.7	10.6	10.6	0.0	0.8	1.00
176	2003	mCS1	241	253	975	93.0	93.0	11.2	11.1	0.0	0.6	1.00
177	2004	mCS1	238	494	1990	92.7	92.7	11.6	11.6	0.0	0.7	1.00
178	2005	mCS1	237	262	1249	92.0	92.0	11.0	11.0	0.1	0.5	1.00
179	2006	mCS1	280	169	660	94.9	94.8	11.9	11.9	0.1	0.4	1.00
180	2007	mCS1	203	171	236	94.7	94.7	9.9	9.9	0.0	0.5	1.00
181	2008	mCS1	172	311	741	94.0	94.0	10.5	10.5	0.0	0.4	1.00
182	2009	mCS1	159	396	1010	94.2	94.1	10.4	10.4	0.1	0.4	1.00
183	2010	mCS1	143	667	1765	95.0	94.9	10.3	10.3	0.1	0.4	1.00
184	2011	mCS1	115	404	751	95.5	95.5	11.7	11.6	0.0	0.4	1.00
185	2012	mCS1	137	542	842	94.1	94.1	8.9	8.9	0.0	0.3	1.00

HOL datacut EBV (me) and official EBV (e) for nordic AI bulls with minimum 15 offspring

Obs	BYR	name	no	mean_noff	std_noff	mean_me	mean_e	std_me	std_e	mean_dif	std_dif	corr
186	2013	mCS1	114	562	872	96.0	96.1	10.4	10.4	0.0	0.4	1.00
187	2014	mCS1	104	759	878	98.2	98.2	9.8	9.7	-0.1	0.3	1.00
188	2015	mCS1	80	1010	1268	98.3	98.4	8.8	8.8	-0.1	0.3	1.00
189	2016	mCS1	63	974	1219	96.3	96.4	9.9	9.9	-0.2	0.3	1.00
190	2017	mCS1	66	990	1237	100.0	100.2	8.6	8.7	-0.3	0.3	1.00
191	2018	mCS1	75	845	1214	99.1	99.4	7.6	7.6	-0.4	0.3	1.00
192	2019	mCS1	49	515	824	100.8	101.3	9.1	9.0	-0.4	0.4	1.00
193	2000	mSB2	375	245	1268	85.6	83.5	9.7	9.5	2.1	1.1	0.99
194	2001	mSB2	438	258	1240	87.9	86.0	9.7	9.5	1.8	1.1	0.99
195	2002	mSB2	397	274	2031	87.5	85.6	10.3	10.1	1.9	0.8	1.00
196	2003	mSB2	352	241	1016	89.3	87.4	9.9	9.8	1.9	0.9	1.00
197	2004	mSB2	359	456	2138	90.6	88.9	10.3	10.0	1.7	0.9	1.00
198	2005	mSB2	352	256	1399	91.3	89.8	10.3	10.0	1.6	0.9	1.00
199	2006	mSB2	395	176	783	92.4	90.8	8.7	8.5	1.6	0.7	1.00
200	2007	mSB2	307	146	239	92.2	90.8	8.1	7.9	1.4	0.7	1.00
201	2008	mSB2	251	264	734	92.2	90.9	8.5	8.2	1.2	0.7	1.00
202	2009	mSB2	224	365	1072	95.5	94.2	7.8	7.6	1.3	0.8	0.99
203	2010	mSB2	193	626	1950	94.9	93.8	7.7	7.5	1.1	0.7	1.00
204	2011	mSB2	155	382	808	96.4	95.4	8.2	8.0	1.0	0.6	1.00
205	2012	mSB2	171	553	981	96.7	95.8	7.2	7.0	0.9	0.6	1.00
206	2013	mSB2	151	566	1034	96.1	95.4	7.7	7.5	0.7	0.7	1.00
207	2014	mSB2	113	862	1046	99.1	98.7	7.4	7.2	0.5	0.5	1.00
208	2015	mSB2	82	1260	1540	99.7	99.6	7.7	7.6	0.1	0.6	1.00
209	2016	mSB2	65	1155	1452	100.0	99.9	6.6	6.4	0.0	0.5	1.00
210	2017	mSB2	66	1054	1274	103.5	103.7	6.2	6.1	-0.2	0.5	1.00
211	2018	mSB2	75	514	835	101.9	102.1	6.0	5.7	-0.2	0.6	1.00
212	2000	mCE2	375	224	1217	87.1	86.6	10.5	10.2	0.5	0.9	1.00
213	2001	mCE2	438	232	1161	87.4	86.9	11.3	10.9	0.5	0.9	1.00
214	2002	mCE2	397	244	1791	88.1	87.7	10.7	10.3	0.4	0.8	1.00
215	2003	mCE2	352	219	945	88.0	87.5	10.3	10.0	0.5	0.8	1.00
216	2004	mCE2	359	413	1953	91.2	90.6	9.2	8.9	0.6	0.9	0.99
217	2005	mCE2	352	228	1251	92.3	91.7	9.4	9.0	0.6	0.6	1.00
218	2006	mCE2	395	156	707	92.1	91.5	9.0	8.7	0.6	0.7	1.00
219	2007	mCE2	307	132	218	93.9	93.2	7.7	7.4	0.6	0.6	1.00
220	2008	mCE2	251	237	669	93.0	92.4	8.3	8.0	0.6	0.6	1.00
221	2009	mCE2	224	329	972	95.2	94.5	8.3	8.0	0.7	0.7	1.00
222	2010	mCE2	193	567	1775	95.5	94.9	8.1	7.8	0.5	0.6	1.00

HOL datacut EBV (me) and official EBV (e) for nordic AI bulls with minimum 15 offspring

Obs	BYR	name	no	mean_noff	std_noff	mean_me	mean_e	std_me	std_e	mean_dif	std_dif	corr
223	2011	mCE2	155	347	736	97.4	96.7	7.6	7.3	0.6	0.6	1.00
224	2012	mCE2	171	500	889	97.1	96.6	6.0	5.9	0.5	0.5	1.00
225	2013	mCE2	151	510	934	97.1	96.8	7.0	6.7	0.3	0.7	0.99
226	2014	mCE2	113	772	943	100.3	100.1	6.8	6.6	0.2	0.5	1.00
227	2015	mCE2	82	1118	1370	100.6	100.7	5.7	5.5	-0.1	0.5	1.00
228	2016	mCE2	65	1017	1280	101.3	101.5	5.1	5.0	-0.2	0.4	1.00
229	2017	mCE2	66	915	1100	103.6	104.0	4.5	4.4	-0.4	0.4	1.00
230	2018	mCE2	74	445	720	103.0	103.5	4.7	4.6	-0.5	0.5	1.00
231	2000	mCS2	272	190	1224	94.7	91.8	11.9	11.9	2.9	0.9	1.00
232	2001	mCS2	300	237	1175	91.3	88.8	11.1	11.0	2.5	0.7	1.00
233	2002	mCS2	272	206	1247	91.8	89.3	11.2	11.2	2.4	0.6	1.00
234	2003	mCS2	241	217	829	94.4	92.3	10.4	10.3	2.1	0.5	1.00
235	2004	mCS2	238	401	1605	93.8	91.9	10.9	10.9	1.9	0.8	1.00
236	2005	mCS2	235	211	996	93.1	91.3	10.6	10.5	1.8	0.5	1.00
237	2006	mCS2	280	135	533	95.7	94.0	10.9	10.8	1.7	0.5	1.00
238	2007	mCS2	203	135	181	94.8	93.3	10.0	9.9	1.5	0.4	1.00
239	2008	mCS2	172	245	575	94.6	93.2	10.3	10.2	1.3	0.4	1.00
240	2009	mCS2	159	321	826	94.9	93.8	11.0	10.8	1.2	0.5	1.00
241	2010	mCS2	143	503	1314	94.2	93.2	9.8	9.7	0.9	0.4	1.00
242	2011	mCS2	114	306	564	95.0	94.2	10.4	10.3	0.8	0.4	1.00
243	2012	mCS2	137	408	632	95.0	94.4	9.2	9.2	0.6	0.4	1.00
244	2013	mCS2	114	423	659	96.1	95.7	9.7	9.7	0.4	0.4	1.00
245	2014	mCS2	103	582	669	96.9	96.7	9.3	9.2	0.2	0.4	1.00
246	2015	mCS2	79	758	930	98.6	98.8	8.9	8.8	-0.1	0.4	1.00
247	2016	mCS2	62	691	855	96.9	97.1	9.0	8.9	-0.3	0.5	1.00
248	2017	mCS2	66	610	771	99.9	100.6	7.7	7.7	-0.7	0.5	1.00
249	2018	mCS2	66	362	530	99.6	100.4	7.2	7.2	-0.8	0.5	1.00
250	2000	brth	375	326	1975	88.9	90.6	10.2	10.1	-1.7	1.0	1.00
251	2001	brth	438	286	1855	85.7	87.3	10.2	10.2	-1.6	1.1	0.99
252	2002	brth	397	310	2570	87.8	89.3	9.9	9.9	-1.5	0.9	1.00
253	2003	brth	353	227	918	88.3	89.7	10.2	10.1	-1.4	0.8	1.00
254	2004	brth	359	576	2951	91.0	92.3	9.6	9.5	-1.3	0.9	1.00
255	2005	brth	353	287	1908	91.7	92.9	9.9	9.8	-1.2	0.8	1.00
256	2006	brth	395	169	947	92.0	93.3	9.1	9.1	-1.2	0.8	1.00
257	2007	brth	307	148	255	91.8	93.0	8.7	8.7	-1.1	0.8	1.00
258	2008	brth	251	303	911	94.1	95.1	8.8	8.7	-1.0	0.8	1.00
259	2009	brth	224	487	1666	96.0	96.8	9.3	9.2	-0.8	0.7	1.00

HOL datacut EBV (me) and official EBV (e) for nordic AI bulls with minimum 15 offspring

Obs	BYR	name	no	mean_noff	std_noff	mean_me	mean_e	std_me	std_e	mean_dif	std_dif	corr
260	2010	brth	193	874	2924	97.6	98.3	7.3	7.3	-0.8	0.6	1.00
261	2011	brth	154	462	1080	97.5	98.2	6.5	6.4	-0.6	0.6	1.00
262	2012	brth	170	732	1354	97.5	98.2	7.8	7.7	-0.7	0.6	1.00
263	2013	brth	151	761	1481	99.9	100.6	6.4	6.3	-0.6	0.6	1.00
264	2014	brth	114	1203	1565	99.8	100.1	6.5	6.4	-0.3	0.7	1.00
265	2015	brth	82	1845	2364	101.3	101.5	6.4	6.0	-0.2	0.6	1.00
266	2016	brth	65	1613	2133	99.9	100.0	6.7	6.5	-0.2	0.5	1.00
267	2017	brth	66	1798	2329	100.6	100.5	7.5	7.3	0.1	0.5	1.00
268	2018	brth	78	1472	2300	100.6	100.5	5.6	5.5	0.2	0.5	1.00
269	2019	brth	56	1572	2374	101.3	101.1	5.5	5.3	0.2	0.5	1.00
270	2020	brth	53	1413	1973	101.6	101.4	5.7	5.4	0.2	0.6	1.00
271	2021	brth	42	877	1250	102.3	101.9	4.8	4.7	0.4	0.5	0.99
272	2000	calv	376	307	1522	85.4	84.4	10.3	10.6	1.0	0.9	1.00
273	2001	calv	438	328	1548	88.2	87.3	9.3	9.4	0.8	0.9	1.00
274	2002	calv	398	333	2370	88.1	87.3	9.8	9.8	0.8	0.8	1.00
275	2003	calv	352	295	1224	89.6	88.8	9.3	9.4	0.9	0.7	1.00
276	2004	calv	359	573	2706	90.4	89.7	9.5	9.4	0.7	0.8	1.00
277	2005	calv	353	321	1781	91.6	91.0	9.7	9.6	0.7	0.7	1.00
278	2006	calv	395	224	1006	93.1	92.5	7.9	7.9	0.7	0.7	1.00
279	2007	calv	308	187	322	92.6	92.1	8.1	8.1	0.5	0.6	1.00
280	2008	calv	251	343	972	92.6	92.1	8.4	8.4	0.5	0.6	1.00
281	2009	calv	224	464	1351	94.1	93.5	7.4	7.4	0.6	0.7	1.00
282	2010	calv	193	836	2597	95.6	95.2	7.7	7.7	0.4	0.6	1.00
283	2011	calv	155	504	1062	96.0	95.6	7.8	7.7	0.4	0.6	1.00
284	2012	calv	171	722	1279	96.4	96.0	7.0	6.9	0.4	0.6	1.00
285	2013	calv	151	739	1345	97.2	96.9	6.9	6.8	0.2	0.6	1.00
286	2014	calv	113	1115	1349	98.1	97.9	8.2	8.1	0.1	0.7	1.00
287	2015	calv	83	1650	2045	100.0	100.0	6.5	6.4	0.0	0.6	1.00
288	2016	calv	66	1583	2004	100.1	100.2	5.8	5.7	-0.1	0.6	0.99
289	2017	calv	66	1667	1985	102.7	102.9	5.6	5.7	-0.3	0.5	1.00
290	2018	calv	78	1347	1936	101.3	101.5	6.1	6.1	-0.2	0.5	1.00
291	2019	calv	53	746	1273	101.4	101.8	4.7	4.5	-0.4	0.5	0.99

HOL datacut EBV (me) and official EBV (e) for nordic AI bulls with minimum 15 offspring

Obs	diff	d_brth	d_calv	p_brth	p_calv
1	-8	.	.	.	.
2	-7	.	.	.	.
3	-6	1	.	0	.
4	-5	5	.	0	.
5	-4	46	.	1	.
6	-3	297	1	6	0
7	-2	1285	14	27	0
8	-1	1869	361	40	8
9	0	962	1625	21	35
10	1	191	2034	4	44
11	2	20	477	0	10
12	3	2	61	0	1
13	4	2	12	0	0
14	5	.	3	.	0
15	6	.	1	.	0
16	7	.	.	.	.
17	8	.	.	.	.
18	9	.	.	.	.
19	14	.	.	.	.

HOL datacut EBV (me) and official EBV (e) for nordic AI bulls with minimum 15 offspring

Obs	diff	d_dSB1	d_dCE1	d_dCS1	d_dSB2	d_dCE2	d_dCS2
1	-8	.	.	.	5	.	.
2	-7	.	.	.	11	.	.
3	-6	.	.	.	50	.	.
4	-5	5	.	.	199	.	.
5	-4	16	.	.	715	1	.
6	-3	138	9	3	1285	10	2
7	-2	833	135	12	1169	175	.
8	-1	2333	1748	176	742	2255	140
9	0	1167	2464	2286	386	2000	2283
10	1	158	245	890	117	169	991
11	2	20	14	26	7	13	8
12	3	8	3	.	4	3	.
13	4	2	1	1	2	.	1
14	5	.	.	.	.	.	.
15	6	.	.	.	.	.	.
16	7	.	.	.	.	.	.
17	8	.	.	.	.	.	.
18	9	.	.	.	1	.	.
19	14	.	.	.	.	.	.

HOL datacut EBV (me) and official EBV (e) for nordic AI bulls with minimum 15 offspring

Obs	diff	d_mSB1	d_mCE1	d_mCS1	d_mSB2	d_mCE2	d_mCS2
1	-8	.	.	.	.	.	.
2	-7	.	.	.	.	.	1
3	-6	.	.	.	.	.	.
4	-5	.	.	2	.	.	.
5	-4	.	1	.	.	.	.
6	-3	1	20	6	4	1	.
7	-2	16	223	50	4	25	13
8	-1	442	1600	565	125	373	139
9	0	2804	2372	2114	537	1854	367
10	1	1218	341	527	1620	1907	924
11	2	88	29	49	1674	309	1199
12	3	16	2	6	449	49	511
13	4	3	.	5	84	5	96
14	5	1	.	.	18	2	11
15	6	.	.	.	11	2	3
16	7	.	.	.	2	.	.
17	8	.	.	.	1	.	.
18	9	.	.	.	.	.	.
19	14	.	.	.	.	1	.

HOL datacut EBV (me) and official EBV (e) for nordic AI bulls with minimum 15 offspring

Obs	diff	p_dSB1	p_dCE1	p_dCS1	p_dSB2	p_dCE2	p_dCS2
1	-8	.	.	.	0	.	.
2	-7	.	.	.	0	.	.
3	-6	.	.	.	1	.	.
4	-5	0	.	.	4	.	.
5	-4	0	.	.	15	0	.
6	-3	3	0	0	27	0	0
7	-2	18	3	0	25	4	.
8	-1	50	38	5	16	49	4
9	0	25	53	67	8	43	67
10	1	3	5	26	2	4	29
11	2	0	0	1	0	0	0
12	3	0	0	.	0	0	.
13	4	0	0	0	0	.	0
14	5	.	.	.	.	.	.
15	6	.	.	.	.	.	.
16	7	.	.	.	.	.	.
17	8	.	.	.	.	.	.
18	9	.	.	.	0	.	.
19	14	.	.	.	.	.	.

HOL datacut EBV (me) and official EBV (e) for nordic AI bulls with minimum 15 offspring

Obs	diff	p_mSB1	p_mCE1	p_mCS1	p_mSB2	p_mCE2	p_mCS2
1	-8	.	.	.	.	.	.
2	-7	.	.	.	.	.	0
3	-6	.	.	.	.	.	.
4	-5	.	.	0	.	.	.
5	-4	.	0	.	.	.	.
6	-3	0	0	0	0	0	.
7	-2	0	5	2	0	1	0
8	-1	10	35	17	3	8	4
9	0	61	52	64	12	41	11
10	1	27	7	16	36	42	28
11	2	2	1	1	37	7	37
12	3	0	0	0	10	1	16
13	4	0	.	0	2	0	3
14	5	0	.	.	0	0	0
15	6	.	.	.	0	0	0
16	7	.	.	.	0	.	.
17	8	.	.	.	0	.	.
18	9	.	.	.	.	.	.
19	14	.	.	.	.	0	.

HOL SS and traditional breeding value for nongenotyped females with phenotype

Obs	BYR	name	no	mean_ss	mean_e	std_ss	std_e	mean_dif	std_dif	corr_SS
1	2010	dSB1	83273	95.9	95.5	6.4	6.3	0.5	0.9	0.99
2	2011	dSB1	84212	96.2	96.0	6.2	6.1	0.1	1.0	0.99
3	2012	dSB1	83335	96.7	96.8	6.0	5.9	0.0	1.0	0.99
4	2013	dSB1	80231	96.6	96.8	5.6	5.6	-0.2	1.0	0.98
5	2014	dSB1	85753	96.5	96.8	5.4	5.3	-0.3	1.1	0.98
6	2015	dSB1	85658	96.8	97.1	5.6	5.6	-0.3	1.1	0.98
7	2016	dSB1	84643	98.5	98.7	5.7	5.7	-0.2	1.1	0.98
8	2017	dSB1	76823	99.1	99.3	5.9	5.8	-0.1	1.1	0.98
9	2018	dSB1	73334	99.1	99.3	5.5	5.5	-0.2	1.1	0.98
10	2019	dSB1	69277	98.9	99.1	5.8	5.8	-0.2	1.1	0.98
11	2020	dSB1	70837	99.7	99.7	5.1	5.2	0.0	1.2	0.97
12	2021	dSB1	72094	100.2	99.9	4.9	4.9	0.3	1.1	0.98
13	2022	dSB1	71882	100.5	100.0	4.7	4.8	0.6	1.0	0.98
14	2023	dSB1	71255	100.9	100.0	4.4	4.5	0.9	1.1	0.97
15	2024	dSB1	16910	101.7	100.7	4.1	4.1	1.0	1.2	0.96
16	2010	dCE1	75306	93.3	93.3	6.3	6.3	0.0	0.6	1.00
17	2011	dCE1	75229	94.1	94.3	6.0	6.0	-0.1	0.7	0.99
18	2012	dCE1	73315	95.2	95.4	5.6	5.6	-0.2	0.8	0.99
19	2013	dCE1	68531	95.8	96.0	5.3	5.3	-0.2	0.8	0.99
20	2014	dCE1	72952	96.8	97.0	5.3	5.3	-0.2	0.9	0.99
21	2015	dCE1	72142	97.1	97.3	5.4	5.4	-0.2	0.9	0.98
22	2016	dCE1	73039	98.6	98.8	5.4	5.4	-0.1	1.0	0.98
23	2017	dCE1	65924	99.3	99.4	5.3	5.3	-0.1	0.9	0.98
24	2018	dCE1	62777	99.4	99.6	5.1	5.1	-0.1	0.9	0.98
25	2019	dCE1	58573	99.5	99.5	4.9	5.0	-0.1	0.9	0.98
26	2020	dCE1	59602	99.8	99.8	4.7	4.8	0.0	0.9	0.98
27	2021	dCE1	61036	100.5	100.4	4.4	4.4	0.1	0.9	0.98
28	2022	dCE1	60383	100.9	100.7	4.2	4.2	0.3	0.8	0.98
29	2023	dCE1	59449	101.3	100.9	3.9	3.9	0.4	0.9	0.98
30	2024	dCE1	14086	101.6	101.1	3.8	3.8	0.4	1.0	0.97
31	2010	dCS1	62366	107.1	106.8	7.4	7.6	0.3	0.7	1.00
32	2011	dCS1	61538	105.9	105.6	7.2	7.4	0.3	0.8	0.99
33	2012	dCS1	59382	105.1	104.8	7.1	7.3	0.3	0.8	0.99
34	2013	dCS1	55350	104.3	103.9	6.7	6.9	0.3	0.9	0.99
35	2014	dCS1	60107	102.9	102.5	6.9	7.1	0.4	1.0	0.99
36	2015	dCS1	60444	102.6	102.4	6.8	7.0	0.3	1.0	0.99
37	2016	dCS1	61515	101.4	101.2	6.8	6.9	0.2	1.1	0.99

HOL SS and traditional breeding value for nongenotyped females with phenotype

Obs	BYR	name	no	mean_ss	mean_e	std_ss	std_e	mean_dif	std_dif	corr_SS
38	2017	dCS1	55571	100.6	100.5	6.6	6.7	0.2	1.1	0.99
39	2018	dCS1	52573	100.2	100.1	6.6	6.7	0.1	1.0	0.99
40	2019	dCS1	48412	100.1	100.1	6.4	6.6	0.0	1.1	0.99
41	2020	dCS1	49283	99.8	99.8	6.3	6.4	-0.1	1.1	0.99
42	2021	dCS1	51314	99.2	99.3	5.9	6.0	-0.1	1.0	0.98
43	2022	dCS1	51165	98.5	98.8	5.9	6.0	-0.3	0.9	0.99
44	2023	dCS1	50611	98.3	98.7	5.7	5.8	-0.4	1.0	0.99
45	2024	dCS1	11815	98.0	98.5	5.8	5.8	-0.5	1.2	0.98
46	2010	dSB2	126350	94.2	94.6	6.0	6.0	-0.4	0.8	0.99
47	2011	dSB2	125263	94.7	95.5	5.8	5.8	-0.7	1.0	0.99
48	2012	dSB2	125574	94.9	95.6	5.5	5.5	-0.8	1.0	0.98
49	2013	dSB2	125302	95.1	95.9	5.3	5.3	-0.8	1.0	0.98
50	2014	dSB2	122084	95.9	96.7	5.3	5.3	-0.8	1.1	0.98
51	2015	dSB2	119682	96.5	97.1	5.2	5.2	-0.7	1.1	0.98
52	2016	dSB2	116524	97.7	98.2	5.2	5.1	-0.5	1.2	0.97
53	2017	dSB2	105502	97.9	98.3	5.2	5.2	-0.4	1.2	0.98
54	2018	dSB2	98269	98.1	98.6	5.0	5.1	-0.5	1.1	0.97
55	2019	dSB2	95742	98.3	98.7	4.9	4.9	-0.4	1.1	0.97
56	2020	dSB2	93508	99.3	99.3	4.7	4.7	0.0	1.2	0.97
57	2021	dSB2	92789	99.9	99.5	4.4	4.5	0.3	1.2	0.97
58	2022	dSB2	85566	100.4	99.9	4.4	4.4	0.5	1.1	0.97
59	2023	dSB2	80418	100.8	100.1	4.2	4.3	0.7	1.2	0.96
60	2024	dSB2	17778	101.1	100.2	4.1	4.2	0.9	1.4	0.94
61	2010	dCE2	111482	93.6	93.4	6.1	6.1	0.2	0.6	1.00
62	2011	dCE2	109997	94.3	94.2	5.9	5.9	0.1	0.7	0.99
63	2012	dCE2	108900	94.7	94.6	5.6	5.6	0.1	0.7	0.99
64	2013	dCE2	106010	95.4	95.3	5.3	5.3	0.1	0.8	0.99
65	2014	dCE2	102222	95.9	95.9	5.2	5.2	0.1	0.8	0.99
66	2015	dCE2	99857	96.6	96.6	5.1	5.1	0.0	0.9	0.99
67	2016	dCE2	98764	97.7	97.7	4.9	4.9	0.0	0.9	0.98
68	2017	dCE2	89362	98.1	98.1	4.9	4.9	0.0	0.9	0.98
69	2018	dCE2	82879	98.4	98.5	4.7	4.7	-0.1	0.9	0.98
70	2019	dCE2	80375	98.4	98.5	4.4	4.5	-0.1	0.8	0.98
71	2020	dCE2	77682	99.2	99.2	4.4	4.4	0.0	0.8	0.98
72	2021	dCE2	77150	99.9	99.8	4.1	4.2	0.1	0.8	0.98
73	2022	dCE2	71126	100.0	99.9	3.9	3.9	0.1	0.8	0.98
74	2023	dCE2	65812	100.1	100.0	3.7	3.7	0.1	0.8	0.98

HOL SS and traditional breeding value for nongenotyped females with phenotype

Obs	BYR	name	no	mean_ss	mean_e	std_ss	std_e	mean_dif	std_dif	corr_SS
75	2024	dCE2	14580	100.3	100.2	3.6	3.6	0.1	1.0	0.96
76	2010	dCS2	93473	109.8	109.3	7.3	7.6	0.5	0.7	1.00
77	2011	dCS2	91393	108.7	108.2	7.3	7.5	0.5	0.7	1.00
78	2012	dCS2	89414	107.9	107.3	7.2	7.4	0.5	0.8	0.99
79	2013	dCS2	86790	106.8	106.3	6.7	6.9	0.5	0.8	0.99
80	2014	dCS2	83748	105.8	105.3	6.9	7.1	0.4	0.9	0.99
81	2015	dCS2	82395	104.5	104.1	6.9	7.1	0.4	1.0	0.99
82	2016	dCS2	81502	103.5	103.1	6.7	6.9	0.3	1.0	0.99
83	2017	dCS2	73388	103.0	102.7	6.5	6.7	0.3	1.0	0.99
84	2018	dCS2	67654	102.7	102.6	6.3	6.5	0.2	0.9	0.99
85	2019	dCS2	65183	102.1	102.0	6.3	6.5	0.1	0.9	0.99
86	2020	dCS2	62378	100.9	100.9	6.3	6.4	0.0	0.9	0.99
87	2021	dCS2	61973	99.9	100.0	5.9	6.0	-0.1	1.0	0.99
88	2022	dCS2	57077	99.5	99.7	5.9	6.0	-0.2	0.9	0.99
89	2023	dCS2	52540	99.2	99.5	5.7	5.8	-0.4	0.9	0.99
90	2024	dCS2	11462	98.5	98.9	5.9	5.9	-0.5	1.2	0.98
91	2010	mSB1	150671	91.9	92.6	5.4	5.6	-0.6	0.9	0.99
92	2011	mSB1	150685	92.8	93.4	5.4	5.5	-0.7	0.9	0.99
93	2012	mSB1	152716	93.5	94.1	5.3	5.5	-0.7	1.0	0.98
94	2013	mSB1	148867	94.6	95.3	5.4	5.6	-0.7	1.1	0.98
95	2014	mSB1	149425	94.7	95.3	5.1	5.2	-0.6	1.2	0.98
96	2015	mSB1	142311	95.4	96.0	5.1	5.2	-0.6	1.2	0.97
97	2016	mSB1	135894	96.4	96.8	4.9	5.0	-0.4	1.3	0.97
98	2017	mSB1	118957	97.0	97.2	5.2	5.4	-0.3	1.3	0.97
99	2018	mSB1	114086	98.4	98.6	5.0	5.0	-0.2	1.2	0.97
100	2019	mSB1	109617	98.9	99.0	4.6	4.6	-0.1	1.2	0.97
101	2020	mSB1	105304	99.7	99.7	4.6	4.6	0.0	1.2	0.96
102	2021	mSB1	96801	99.8	99.6	4.3	4.3	0.2	1.2	0.96
103	2022	mSB1	17481	100.6	100.3	4.1	4.0	0.3	1.3	0.95
104	2010	mCE1	131786	90.6	90.8	6.0	6.1	-0.2	0.8	0.99
105	2011	mCE1	128449	91.4	91.7	5.6	5.7	-0.2	0.9	0.99
106	2012	mCE1	129229	92.1	92.4	5.5	5.6	-0.3	0.9	0.99
107	2013	mCE1	125063	93.2	93.5	5.8	5.9	-0.3	1.0	0.99
108	2014	mCE1	128969	93.8	94.1	5.2	5.3	-0.3	1.1	0.98
109	2015	mCE1	122083	94.7	95.0	5.1	5.2	-0.3	1.1	0.98
110	2016	mCE1	116300	95.7	95.9	5.0	5.1	-0.2	1.2	0.97
111	2017	mCE1	100916	96.5	96.7	5.1	5.1	-0.2	1.2	0.97

HOL SS and traditional breeding value for nongenotyped females with phenotype

Obs	BYR	name	no	mean_ss	mean_e	std_ss	std_e	mean_dif	std_dif	corr_SS
112	2018	mCE1	96030	97.8	97.9	4.6	4.7	-0.1	1.1	0.97
113	2019	mCE1	91703	98.8	98.9	4.6	4.6	-0.1	1.1	0.97
114	2020	mCE1	87361	99.6	99.6	4.4	4.4	0.0	1.1	0.97
115	2021	mCE1	79907	99.9	99.8	4.0	4.0	0.2	1.1	0.96
116	2022	mCE1	14280	100.6	100.4	4.0	3.9	0.3	1.2	0.96
117	2010	mCS1	106520	92.4	93.1	7.0	7.2	-0.6	1.0	0.99
118	2011	mCS1	103767	92.8	93.4	7.4	7.5	-0.6	1.2	0.99
119	2012	mCS1	106239	93.5	94.2	7.0	7.2	-0.6	1.2	0.99
120	2013	mCS1	104320	94.1	94.7	6.6	6.7	-0.7	1.3	0.98
121	2014	mCS1	107502	94.8	95.3	6.5	6.6	-0.6	1.4	0.98
122	2015	mCS1	101233	95.6	96.1	6.3	6.4	-0.5	1.5	0.97
123	2016	mCS1	95445	96.1	96.5	6.5	6.6	-0.4	1.6	0.97
124	2017	mCS1	82185	97.4	97.7	6.2	6.3	-0.3	1.6	0.97
125	2018	mCS1	78606	97.0	97.2	6.1	6.2	-0.3	1.5	0.97
126	2019	mCS1	75495	98.2	98.3	6.0	6.1	-0.1	1.5	0.97
127	2020	mCS1	71674	99.3	99.3	5.7	5.8	0.0	1.6	0.96
128	2021	mCS1	65925	99.8	99.7	5.5	5.5	0.1	1.6	0.96
129	2022	mCS1	11751	101.2	101.0	5.6	5.6	0.2	1.8	0.95
130	2010	mSB2	123383	91.1	91.3	6.2	6.3	-0.2	1.0	0.99
131	2011	mSB2	119659	92.7	92.8	6.0	6.0	-0.2	1.1	0.98
132	2012	mSB2	119697	94.0	94.1	5.6	5.5	-0.1	1.2	0.98
133	2013	mSB2	114988	94.3	94.4	5.5	5.5	-0.1	1.2	0.98
134	2014	mSB2	113337	94.8	94.9	5.3	5.3	-0.1	1.3	0.97
135	2015	mSB2	108261	95.2	95.3	5.5	5.5	-0.1	1.4	0.97
136	2016	mSB2	104397	96.1	96.2	5.4	5.3	-0.1	1.5	0.96
137	2017	mSB2	93878	97.2	97.4	5.3	5.3	-0.1	1.5	0.96
138	2018	mSB2	85612	98.4	98.5	5.2	5.1	0.0	1.4	0.96
139	2019	mSB2	76941	99.1	99.1	5.1	5.1	0.0	1.5	0.96
140	2020	mSB2	63758	99.8	99.8	4.9	4.9	-0.1	1.5	0.95
141	2021	mSB2	10154	99.6	99.4	4.8	4.7	0.2	1.8	0.93
142	2022	mSB2	4	.	.	.	.	.	.	0.16
143	2010	mCE2	107806	90.5	90.7	6.5	6.5	-0.1	0.9	0.99
144	2011	mCE2	104316	91.7	91.8	6.1	6.2	-0.1	1.0	0.99
145	2012	mCE2	105114	92.9	93.0	5.9	5.9	-0.1	1.1	0.98
146	2013	mCE2	101567	93.5	93.7	5.8	5.9	-0.1	1.2	0.98
147	2014	mCE2	100093	94.4	94.5	5.5	5.5	-0.1	1.3	0.97
148	2015	mCE2	94662	94.9	95.0	5.3	5.3	-0.1	1.3	0.97

HOL SS and traditional breeding value for nongenotyped females with phenotype

Obs	BYR	name	no	mean_ss	mean_e	std_ss	std_e	mean_dif	std_dif	corr_SS
149	2016	mCE2	91042	96.0	96.1	5.2	5.2	-0.1	1.3	0.97
150	2017	mCE2	80763	96.8	96.9	4.9	4.9	-0.1	1.3	0.97
151	2018	mCE2	73036	97.9	97.9	4.7	4.7	0.0	1.2	0.97
152	2019	mCE2	64835	99.0	99.1	4.6	4.6	-0.1	1.2	0.97
153	2020	mCE2	51973	99.5	99.5	4.3	4.3	0.0	1.3	0.96
154	2021	mCE2	8236	99.6	99.5	4.2	4.2	0.1	1.4	0.94
155	2022	mCE2	4	.	.	.	.	.	.	0.58
156	2010	mCS2	88656	93.2	94.2	6.9	7.2	-1.0	1.0	0.99
157	2011	mCS2	85715	94.0	95.0	7.1	7.4	-1.0	1.2	0.99
158	2012	mCS2	86708	94.4	95.3	6.8	7.1	-0.9	1.2	0.99
159	2013	mCS2	83265	94.5	95.4	6.2	6.4	-0.9	1.3	0.98
160	2014	mCS2	81691	95.0	95.7	6.4	6.6	-0.7	1.4	0.98
161	2015	mCS2	76522	96.3	96.9	6.4	6.5	-0.6	1.5	0.97
162	2016	mCS2	73329	96.4	96.8	6.2	6.3	-0.4	1.6	0.97
163	2017	mCS2	64929	97.6	97.9	6.1	6.2	-0.4	1.6	0.97
164	2018	mCS2	58694	98.0	98.3	6.2	6.3	-0.2	1.5	0.97
165	2019	mCS2	52482	98.4	98.5	5.7	5.8	-0.1	1.5	0.97
166	2020	mCS2	41936	99.8	99.8	5.2	5.3	0.0	1.6	0.95
167	2021	mCS2	6742	99.6	99.4	5.3	5.4	0.1	1.8	0.94
168	2010	brth	83273	95.1	94.9	6.1	6.0	0.2	0.8	0.99
169	2011	brth	84212	95.5	95.6	6.0	5.9	-0.1	0.9	0.99
170	2012	brth	83335	96.1	96.4	5.6	5.6	-0.3	0.9	0.99
171	2013	brth	80231	96.1	96.5	5.2	5.2	-0.4	1.0	0.98
172	2014	brth	85753	96.4	96.9	5.0	5.0	-0.5	1.0	0.98
173	2015	brth	85658	96.7	97.1	5.1	5.1	-0.4	1.1	0.98
174	2016	brth	84643	98.3	98.5	5.2	5.2	-0.3	1.1	0.98
175	2017	brth	76823	99.0	99.1	5.4	5.4	-0.2	1.1	0.98
176	2018	brth	73334	99.2	99.4	5.1	5.1	-0.2	1.0	0.98
177	2019	brth	69277	99.0	99.2	5.2	5.3	-0.2	1.1	0.98
178	2020	brth	70837	99.8	99.7	4.8	4.8	0.0	1.1	0.97
179	2021	brth	72094	100.3	100.0	4.5	4.5	0.3	1.0	0.97
180	2022	brth	71882	100.8	100.2	4.3	4.4	0.6	1.0	0.97
181	2023	brth	71255	101.2	100.3	4.0	4.1	0.9	1.0	0.97
182	2024	brth	16910	101.8	100.8	3.8	3.8	1.0	1.1	0.95
183	2010	calv	150671	90.9	91.4	5.5	5.7	-0.5	0.8	0.99
184	2011	calv	150685	92.0	92.5	5.4	5.5	-0.5	0.9	0.99
185	2012	calv	152716	93.0	93.5	5.2	5.3	-0.5	1.0	0.98

HOL SS and traditional breeding value for nongenotyped females with phenotype

Obs	BYR	name	no	mean_ss	mean_e	std_ss	std_e	mean_dif	std_dif	corr_SS
186	2013	calv	148867	93.9	94.4	5.3	5.4	-0.5	1.0	0.98
187	2014	calv	149425	94.2	94.6	5.0	5.1	-0.4	1.1	0.98
188	2015	calv	142311	94.9	95.3	5.0	5.1	-0.4	1.2	0.97
189	2016	calv	135894	95.9	96.2	4.9	4.9	-0.3	1.3	0.97
190	2017	calv	118957	96.8	96.9	5.1	5.1	-0.2	1.2	0.97
191	2018	calv	114086	98.2	98.3	4.9	4.9	-0.2	1.2	0.97
192	2019	calv	109617	98.8	98.9	4.6	4.6	-0.1	1.2	0.97
193	2020	calv	105304	99.6	99.6	4.6	4.6	0.0	1.2	0.97
194	2021	calv	96801	99.7	99.4	4.3	4.2	0.3	1.3	0.95
195	2022	calv	17481	100.4	100.1	4.2	4.0	0.3	1.4	0.94

HOL SS and traditional breeding value for nongenotyped females with phenotype

Obs	diff	d_brth	d_calv	p_brth	p_calv
1	-18	.	.	.	.
2	-16	.	.	.	.
3	-15	.	.	.	.
4	-14	.	.	.	.
5	-13	.	2	.	0
6	-12	.	.	.	.
7	-11	.	4	.	0
8	-10	1	18	0	0
9	-9	3	63	0	0
10	-8	5	173	0	0
11	-7	44	527	0	0
12	-6	150	1369	0	0
13	-5	562	3669	0	0
14	-4	2122	9290	0	1
15	-3	9717	24168	1	2
16	-2	38838	82050	4	5
17	-1	293351	519501	26	33
18	0	504570	712144	45	45
19	1	191770	164307	17	10
20	2	42272	45579	4	3
21	3	16446	17048	1	1
22	4	6062	7537	1	0
23	5	2447	3259	0	0
24	6	791	1328	0	0
25	7	266	507	0	0
26	8	79	175	0	0
27	9	15	73	0	0
28	10	5	18	0	0
29	11	.	4	.	0
30	12	1	1	0	0
31	13	.	.	.	.
32	14	.	1	.	0
33	15	.	.	.	.
34	16	.	.	.	.

HOL SS and traditional breeding value for nongenotyped females with phenotype

Obs	diff	d_dSB1	d_dCE1	d_dCS1	d_dSB2	d_dCE2	d_dCS2
1	-18	.	.	.	.	.	.
2	-16	.	.	.	.	.	.
3	-15	.	.	.	.	.	.
4	-14	.	.	.	.	.	.
5	-13	.	.	.	.	.	.
6	-12	.	.	6	.	.	3
7	-11	.	.	19	2	.	1
8	-10	1	.	13	2	.	26
9	-9	4	4	56	10	.	52
10	-8	14	4	110	53	8	99
11	-7	39	25	327	187	23	275
12	-6	183	119	775	520	80	631
13	-5	672	470	1786	1957	423	1558
14	-4	2940	1481	3612	8411	1945	3270
15	-3	10630	4999	7452	29907	7267	7224
16	-2	41953	18789	17502	125904	24150	17745
17	-1	236715	183493	86347	570299	147032	85932
18	0	511566	601422	456271	529805	889077	566033
19	1	222453	104878	188413	179063	184460	342181
20	2	51513	21972	17535	52651	27292	22652
21	3	18752	9189	6287	19445	9303	7268
22	4	7548	3567	2840	7635	3441	3142
23	5	2965	1330	1313	2948	1175	1410
24	6	1049	430	504	1031	365	569
25	7	365	114	200	360	113	191
26	8	115	49	53	112	36	64
27	9	34	7	23	37	5	30
28	10	2	2	2	11	2	7
29	11	1	.	.	1	1	5
30	12	3	.	.	.	.	1
31	13	.	.	.	.	.	.
32	14	.	.	.	.	.	1
33	15	.	.	.	.	.	.
34	16	.	.	.	.	.	.

HOL SS and traditional breeding value for nongenotyped females with phenotype

Obs	diff	d_mSB1	d_mCE1	d_mCS1	d_mSB2	d_mCE2	d_mCS2
1	-18	.	.	1	.	.	.
2	-16	.	.	.	.	.	1
3	-15	.	.	1	.	.	2
4	-14	.	.	8	4	.	3
5	-13	1	1	13	7	2	10
6	-12	1	1	26	6	2	13
7	-11	4	2	61	14	3	45
8	-10	33	17	129	36	20	96
9	-9	77	35	371	109	58	254
10	-8	215	142	663	264	137	514
11	-7	660	386	1384	676	390	1099
12	-6	1697	1083	2866	1656	953	2263
13	-5	4671	2910	5941	3830	2523	4725
14	-4	11533	6938	12579	8990	5837	10119
15	-3	29223	15852	28288	21340	14690	23593
16	-2	108481	47416	86614	63958	39141	98910
17	-1	622986	337281	399928	259801	212081	333103
18	0	597571	750762	401449	528401	534653	223344
19	1	144967	132657	99692	162914	110952	60404
20	2	42329	33903	36435	46566	34405	21261
21	3	16493	13198	17742	19216	17203	10772
22	4	6868	5787	8520	8903	6237	5269
23	5	3060	2294	4115	4052	2713	2583
24	6	1247	901	2027	1952	917	1268
25	7	460	340	970	777	350	558
26	8	160	110	455	363	99	258
27	9	52	45	228	156	51	107
28	10	18	9	87	50	21	64
29	11	5	4	45	19	7	19
30	12	1	2	16	6	1	8
31	13	1	.	4	2	1	1
32	14	1	.	3	1	.	2
33	15	.	.	1	.	.	.
34	16	.	.	.	.	.	1

HOL SS and traditional breeding value for nongenotyped females with phenotype

Obs	diff	p_dSB1	p_dCE1	p_dCS1	p_dSB2	p_dCE2	p_dCS2
1	-18	.	.	.	.	.	.
2	-16	.	.	.	.	.	.
3	-15	.	.	.	.	.	.
4	-14	.	.	.	.	.	.
5	-13	.	.	.	.	.	.
6	-12	.	.	0	.	.	0
7	-11	.	.	0	0	.	0
8	-10	0	.	0	0	.	0
9	-9	0	0	0	0	.	0
10	-8	0	0	0	0	0	0
11	-7	0	0	0	0	0	0
12	-6	0	0	0	0	0	0
13	-5	0	0	0	0	0	0
14	-4	0	0	0	1	0	0
15	-3	1	1	1	2	1	1
16	-2	4	2	2	8	2	2
17	-1	21	19	11	37	11	8
18	0	46	63	58	35	69	53
19	1	20	11	24	12	14	32
20	2	5	2	2	3	2	2
21	3	2	1	1	1	1	1
22	4	1	0	0	0	0	0
23	5	0	0	0	0	0	0
24	6	0	0	0	0	0	0
25	7	0	0	0	0	0	0
26	8	0	0	0	0	0	0
27	9	0	0	0	0	0	0
28	10	0	0	0	0	0	0
29	11	0	.	.	0	0	0
30	12	0	.	.	.	.	0
31	13	.	.	.	.	.	.
32	14	.	.	.	.	.	0
33	15	.	.	.	.	.	.
34	16	.	.	.	.	.	.

HOL SS and traditional breeding value for nongenotyped females with phenotype

Obs	diff	p_mSB1	p_mCE1	p_mCS1	p_mSB2	p_mCE2	p_mCS2
1	-18	.	.	0	.	.	.
2	-16	.	.	.	.	.	0
3	-15	.	.	0	.	.	0
4	-14	.	.	0	0	.	0
5	-13	0	0	0	0	0	0
6	-12	0	0	0	0	0	0
7	-11	0	0	0	0	0	0
8	-10	0	0	0	0	0	0
9	-9	0	0	0	0	0	0
10	-8	0	0	0	0	0	0
11	-7	0	0	0	0	0	0
12	-6	0	0	0	0	0	0
13	-5	0	0	1	0	0	1
14	-4	1	1	1	1	1	1
15	-3	2	1	3	2	1	3
16	-2	7	4	8	6	4	12
17	-1	39	25	36	23	22	42
18	0	38	56	36	47	54	28
19	1	9	10	9	14	11	8
20	2	3	3	3	4	3	3
21	3	1	1	2	2	2	1
22	4	0	0	1	1	1	1
23	5	0	0	0	0	0	0
24	6	0	0	0	0	0	0
25	7	0	0	0	0	0	0
26	8	0	0	0	0	0	0
27	9	0	0	0	0	0	0
28	10	0	0	0	0	0	0
29	11	0	0	0	0	0	0
30	12	0	0	0	0	0	0
31	13	0	.	0	0	0	0
32	14	0	.	0	0	.	0
33	15	.	.	0	.	.	.
34	16	.	.	.	.	.	0

HOL SS and traditional breeding value for nordic AI bulls with minimum 15 offspring

Obs	BYR	name	no	mean_noff	std_noff	mean_ss	mean_e	std_ss	std_e	mean_dif	std_dif	corr_SS
1	2010	dSB1	193	874	2924	95.7	97.9	7.3	7.8	-2.2	2.4	0.95
2	2011	dSB1	154	462	1080	96.7	97.7	6.7	7.1	-0.9	2.1	0.96
3	2012	dSB1	170	732	1354	96.4	97.5	8.1	8.3	-1.1	2.3	0.96
4	2013	dSB1	151	761	1481	100.0	100.6	6.8	7.2	-0.6	2.1	0.96
5	2014	dSB1	114	1203	1565	99.1	99.8	7.1	7.2	-0.6	1.8	0.97
6	2015	dSB1	82	1845	2364	101.2	101.6	7.4	7.6	-0.4	1.6	0.98
7	2016	dSB1	65	1613	2133	99.0	99.7	7.6	7.8	-0.6	1.3	0.99
8	2017	dSB1	66	1798	2329	100.0	100.3	7.9	8.2	-0.3	1.8	0.98
9	2018	dSB1	78	1472	2300	100.7	100.4	6.5	6.4	0.3	1.5	0.97
10	2019	dSB1	56	1572	2374	102.6	101.0	6.6	6.4	1.6	1.9	0.96
11	2020	dSB1	53	1413	1973	102.6	101.1	6.0	6.1	1.5	1.6	0.97
12	2021	dSB1	42	877	1250	103.7	102.3	4.9	5.2	1.4	1.6	0.95
13	2010	dCE1	193	768	2585	96.2	96.9	7.4	7.6	-0.7	1.7	0.97
14	2011	dCE1	154	402	946	96.6	97.1	6.6	7.2	-0.4	1.5	0.98
15	2012	dCE1	170	636	1194	97.8	98.2	7.4	7.8	-0.4	1.5	0.98
16	2013	dCE1	151	669	1328	100.4	100.7	6.4	6.7	-0.3	1.7	0.97
17	2014	dCE1	114	1072	1414	99.7	99.8	6.7	6.9	-0.1	1.2	0.98
18	2015	dCE1	82	1640	2124	101.1	101.5	4.6	4.8	-0.4	1.1	0.97
19	2016	dCE1	65	1426	1907	100.6	100.9	5.6	5.6	-0.4	0.8	0.99
20	2017	dCE1	66	1583	2063	100.8	101.1	5.6	5.8	-0.2	1.1	0.98
21	2018	dCE1	78	1288	2026	101.2	100.9	4.4	4.8	0.3	1.3	0.96
22	2019	dCE1	56	1378	2083	102.6	101.9	4.3	4.6	0.7	1.2	0.97
23	2020	dCE1	52	1258	1729	103.8	102.9	3.6	3.5	0.9	1.4	0.92
24	2021	dCE1	42	763	1088	102.1	101.5	4.5	4.5	0.6	1.4	0.95
25	2010	dCS1	143	684	2018	102.7	102.3	8.9	9.0	0.4	1.6	0.98
26	2011	dCS1	115	335	744	102.3	102.0	7.9	8.2	0.2	1.5	0.98
27	2012	dCS1	136	526	901	101.6	101.4	8.0	8.5	0.2	1.4	0.99
28	2013	dCS1	114	569	992	99.8	99.6	8.0	8.5	0.3	1.4	0.99
29	2014	dCS1	103	865	1115	99.4	99.4	8.1	8.3	0.0	1.2	0.99
30	2015	dCS1	81	1158	1590	97.3	97.4	6.7	6.9	0.0	1.1	0.99
31	2016	dCS1	63	999	1413	98.3	98.2	7.0	7.3	0.0	1.2	0.99
32	2017	dCS1	66	1087	1556	97.5	97.7	7.5	7.7	-0.2	1.2	0.99
33	2018	dCS1	75	929	1503	98.3	98.6	6.5	6.8	-0.4	1.5	0.98
34	2019	dCS1	53	1020	1525	96.7	97.1	5.4	5.6	-0.4	1.6	0.96
35	2020	dCS1	46	1022	1312	95.5	96.5	5.5	5.2	-1.0	1.9	0.94
36	2021	dCS1	27	900	916	96.3	97.1	6.1	6.0	-0.9	1.6	0.96
37	2010	dSB2	193	1308	3577	94.8	97.5	7.1	7.6	-2.7	2.2	0.96

HOL SS and traditional breeding value for nordic AI bulls with minimum 15 offspring

Obs	BYR	name	no	mean_noff	std_noff	mean_ss	mean_e	std_ss	std_e	mean_dif	std_dif	corr_SS
38	2011	dSB2	155	955	1868	96.1	97.7	7.2	7.4	-1.6	1.9	0.97
39	2012	dSB2	171	1329	2260	96.4	97.7	7.7	8.3	-1.3	2.2	0.97
40	2013	dSB2	151	1324	2257	98.2	98.9	6.4	7.0	-0.7	1.9	0.96
41	2014	dSB2	114	1875	2196	99.7	100.1	7.1	7.0	-0.4	2.0	0.96
42	2015	dSB2	83	2742	3068	100.0	100.4	6.2	6.4	-0.4	1.5	0.97
43	2016	dSB2	66	2598	3067	99.5	100.0	6.4	6.6	-0.5	1.5	0.97
44	2017	dSB2	66	2675	2755	100.6	100.9	6.8	7.2	-0.3	1.6	0.98
45	2018	dSB2	78	2404	2884	101.2	100.7	5.6	5.7	0.6	1.7	0.96
46	2019	dSB2	56	2336	2940	102.9	101.0	5.6	5.6	1.9	2.1	0.93
47	2020	dSB2	58	1719	2456	103.5	101.5	6.0	6.5	2.0	2.5	0.92
48	2021	dSB2	44	1227	1621	104.0	102.3	5.2	5.5	1.7	1.9	0.94
49	2010	dCE2	193	1137	3129	96.6	97.1	6.9	7.4	-0.5	1.4	0.98
50	2011	dCE2	155	832	1635	96.5	96.6	5.6	5.9	-0.1	1.2	0.98
51	2012	dCE2	171	1148	1971	97.8	97.9	6.5	6.7	-0.1	1.2	0.98
52	2013	dCE2	151	1156	1998	98.9	99.0	5.6	6.0	-0.1	1.2	0.98
53	2014	dCE2	114	1652	1949	99.8	99.9	5.6	5.7	0.0	1.1	0.98
54	2015	dCE2	82	2441	2707	100.9	101.2	4.0	4.2	-0.2	0.8	0.98
55	2016	dCE2	66	2280	2692	100.3	100.6	4.5	4.7	-0.3	0.8	0.98
56	2017	dCE2	66	2346	2396	100.3	100.7	4.6	4.7	-0.3	1.0	0.98
57	2018	dCE2	78	2094	2514	100.8	100.8	4.1	4.2	0.0	0.9	0.98
58	2019	dCE2	56	2029	2550	102.3	102.2	3.9	4.1	0.1	0.9	0.98
59	2020	dCE2	57	1518	2141	102.4	101.9	3.5	3.1	0.5	1.5	0.90
60	2021	dCE2	44	1062	1400	100.5	100.3	4.1	4.6	0.3	2.0	0.90
61	2010	dCS2	143	1000	2255	103.6	102.8	8.1	8.3	0.8	0.8	1.00
62	2011	dCS2	116	727	1261	102.9	102.2	8.0	8.3	0.7	0.9	0.99
63	2012	dCS2	137	949	1400	102.4	102.1	7.6	7.8	0.3	1.0	0.99
64	2013	dCS2	114	990	1469	100.4	100.3	7.2	7.5	0.1	0.9	0.99
65	2014	dCS2	104	1267	1397	100.2	100.1	7.4	7.5	0.1	0.9	0.99
66	2015	dCS2	80	1679	1853	98.7	98.7	6.2	6.5	-0.1	0.9	0.99
67	2016	dCS2	64	1547	1802	99.0	99.2	6.9	7.1	-0.1	0.8	0.99
68	2017	dCS2	66	1552	1563	97.7	97.7	7.2	7.4	0.0	0.8	0.99
69	2018	dCS2	77	1418	1694	98.0	98.4	7.1	7.3	-0.4	0.9	0.99
70	2019	dCS2	54	1399	1653	96.4	97.3	6.4	6.5	-0.9	1.0	0.99
71	2020	dCS2	50	1155	1490	95.1	96.3	6.1	6.2	-1.2	1.1	0.98
72	2021	dCS2	37	940	1043	95.3	97.1	7.7	7.3	-1.8	1.8	0.97
73	2010	mSB1	193	836	2597	95.6	96.3	7.9	7.8	-0.7	2.4	0.95
74	2011	mSB1	155	504	1062	95.5	96.2	7.9	8.0	-0.6	2.5	0.95

HOL SS and traditional breeding value for nordic AI bulls with minimum 15 offspring

Obs	BYR	name	no	mean_noff	std_noff	mean_ss	mean_e	std_ss	std_e	mean_dif	std_dif	corr_SS
75	2012	mSB1	171	722	1279	96.3	96.7	7.2	7.3	-0.4	2.3	0.95
76	2013	mSB1	151	739	1345	97.7	98.0	7.1	6.9	-0.3	2.3	0.95
77	2014	mSB1	113	1115	1349	97.9	97.8	8.3	8.8	0.1	2.0	0.97
78	2015	mSB1	83	1650	2045	100.5	100.1	6.6	6.7	0.4	1.6	0.97
79	2016	mSB1	66	1583	2004	100.4	100.0	6.1	6.2	0.4	1.8	0.96
80	2017	mSB1	66	1667	1985	102.5	102.1	6.1	6.1	0.4	1.6	0.97
81	2018	mSB1	78	1347	1936	101.9	100.8	6.8	6.6	1.2	2.1	0.95
82	2019	mSB1	53	746	1273	103.1	101.6	4.9	4.7	1.5	2.6	0.85
83	2010	mCE1	193	733	2302	95.9	96.3	7.5	7.7	-0.4	2.1	0.96
84	2011	mCE1	155	445	948	96.4	96.8	7.4	7.7	-0.4	1.7	0.97
85	2012	mCE1	171	640	1140	96.2	96.4	6.4	6.6	-0.2	1.9	0.96
86	2013	mCE1	151	653	1194	97.8	97.9	5.9	6.3	-0.2	1.9	0.95
87	2014	mCE1	113	984	1201	98.5	99.0	7.2	7.5	-0.4	1.7	0.97
88	2015	mCE1	83	1450	1805	100.4	100.3	5.4	5.8	0.0	1.4	0.97
89	2016	mCE1	66	1387	1763	101.4	101.1	5.4	5.5	0.3	1.6	0.96
90	2017	mCE1	66	1456	1727	103.6	103.3	5.7	5.5	0.2	1.6	0.96
91	2018	mCE1	78	1160	1672	102.5	102.0	5.2	5.3	0.5	1.7	0.95
92	2019	mCE1	53	645	1099	102.6	101.6	4.3	4.4	1.0	1.9	0.90
93	2010	mCS1	143	667	1765	94.4	95.0	10.2	10.3	-0.5	2.7	0.97
94	2011	mCS1	115	404	751	94.7	95.5	11.2	11.7	-0.8	2.8	0.97
95	2012	mCS1	137	542	842	94.4	94.1	8.9	8.9	0.3	2.7	0.95
96	2013	mCS1	114	562	872	95.8	96.0	10.2	10.4	-0.3	2.7	0.97
97	2014	mCS1	104	759	878	98.0	98.2	9.4	9.8	-0.2	2.7	0.96
98	2015	mCS1	80	1010	1268	98.2	98.3	8.1	8.8	-0.1	2.3	0.97
99	2016	mCS1	63	974	1219	96.2	96.3	9.5	9.9	0.0	2.0	0.98
100	2017	mCS1	66	990	1237	99.9	100.0	8.6	8.6	-0.1	2.4	0.96
101	2018	mCS1	75	845	1214	99.7	99.1	7.8	7.6	0.6	3.1	0.92
102	2019	mCS1	49	515	824	101.6	100.8	9.5	9.1	0.7	3.5	0.93
103	2010	mSB2	193	626	1950	94.7	94.9	7.6	7.7	-0.3	2.9	0.93
104	2011	mSB2	155	382	808	96.4	96.4	7.9	8.2	0.0	2.3	0.96
105	2012	mSB2	171	553	981	96.7	96.7	6.9	7.2	-0.1	2.7	0.93
106	2013	mSB2	151	566	1034	96.5	96.1	7.6	7.7	0.4	2.7	0.94
107	2014	mSB2	113	862	1046	99.4	99.1	7.3	7.4	0.3	2.3	0.95
108	2015	mSB2	82	1260	1540	100.2	99.7	7.5	7.7	0.5	1.9	0.97
109	2016	mSB2	65	1155	1452	100.9	100.0	5.9	6.6	0.9	2.2	0.94
110	2017	mSB2	66	1054	1274	104.0	103.5	5.7	6.2	0.5	2.1	0.94
111	2018	mSB2	75	514	835	102.8	101.9	6.3	6.0	0.9	3.3	0.86

HOL SS and traditional breeding value for nordic AI bulls with minimum 15 offspring

Obs	BYR	name	no	mean_noff	std_noff	mean_ss	mean_e	std_ss	std_e	mean_dif	std_dif	corr_SS
112	2010	mCE2	193	567	1775	95.5	95.5	7.4	8.1	0.0	2.6	0.95
113	2011	mCE2	155	347	736	97.1	97.4	7.0	7.6	-0.2	2.0	0.97
114	2012	mCE2	171	500	889	97.0	97.1	5.6	6.0	-0.1	2.2	0.93
115	2013	mCE2	151	510	934	97.4	97.1	6.1	7.0	0.3	2.3	0.95
116	2014	mCE2	113	772	943	100.2	100.3	6.3	6.8	-0.2	1.7	0.97
117	2015	mCE2	82	1118	1370	100.6	100.6	5.3	5.7	0.0	1.4	0.97
118	2016	mCE2	65	1017	1280	101.4	101.3	4.8	5.1	0.1	2.1	0.91
119	2017	mCE2	66	915	1100	104.0	103.6	4.4	4.5	0.4	2.2	0.87
120	2018	mCE2	74	445	720	103.6	103.0	4.4	4.7	0.5	2.6	0.85
121	2010	mCS2	143	503	1314	93.3	94.2	9.7	9.8	-0.9	2.6	0.96
122	2011	mCS2	114	306	564	94.2	95.0	10.1	10.4	-0.8	2.4	0.97
123	2012	mCS2	137	408	632	95.1	95.0	8.9	9.2	0.1	2.2	0.97
124	2013	mCS2	114	423	659	96.0	96.1	9.4	9.7	-0.1	2.4	0.97
125	2014	mCS2	103	582	669	96.9	96.9	8.8	9.3	0.0	2.5	0.96
126	2015	mCS2	79	758	930	98.8	98.6	8.5	8.9	0.2	2.0	0.98
127	2016	mCS2	62	691	855	97.1	96.9	9.1	9.0	0.2	2.2	0.97
128	2017	mCS2	66	610	771	100.3	99.9	7.1	7.7	0.4	2.5	0.95
129	2018	mCS2	66	362	530	100.2	99.6	7.2	7.2	0.6	3.4	0.89
130	2010	brth	193	874	2924	95.3	97.6	6.8	7.3	-2.2	2.0	0.96
131	2011	brth	154	462	1080	96.4	97.5	6.3	6.5	-1.2	1.6	0.97
132	2012	brth	170	732	1354	96.4	97.5	7.4	7.8	-1.0	2.0	0.97
133	2013	brth	151	761	1481	99.4	99.9	6.0	6.4	-0.6	1.7	0.96
134	2014	brth	114	1203	1565	99.4	99.8	6.4	6.5	-0.5	1.5	0.97
135	2015	brth	82	1845	2364	100.9	101.3	6.1	6.4	-0.3	1.3	0.98
136	2016	brth	65	1613	2133	99.4	99.9	6.4	6.7	-0.5	1.1	0.99
137	2017	brth	66	1798	2329	100.3	100.6	7.1	7.5	-0.3	1.6	0.98
138	2018	brth	78	1472	2300	101.1	100.6	5.6	5.6	0.4	1.2	0.98
139	2019	brth	56	1572	2374	102.8	101.3	5.5	5.5	1.5	1.5	0.96
140	2020	brth	53	1413	1973	103.1	101.6	5.5	5.7	1.5	1.6	0.96
141	2021	brth	42	877	1250	103.9	102.3	4.5	4.8	1.6	1.5	0.95
142	2010	calv	193	836	2597	95.1	95.6	7.6	7.7	-0.5	2.2	0.96
143	2011	calv	155	504	1062	95.6	96.0	7.6	7.8	-0.4	2.2	0.96
144	2012	calv	171	722	1279	96.1	96.4	6.7	7.0	-0.3	2.3	0.94
145	2013	calv	151	739	1345	97.2	97.2	7.1	6.9	0.0	2.1	0.95
146	2014	calv	113	1115	1349	98.2	98.1	7.7	8.2	0.1	1.8	0.97
147	2015	calv	83	1650	2045	100.4	100.0	6.3	6.5	0.4	1.6	0.97
148	2016	calv	66	1583	2004	100.6	100.1	5.6	5.8	0.6	1.6	0.96

HOL SS and traditional breeding value for nordic AI bulls with minimum 15 offspring

Obs	BYR	name	no	mean_noff	std_noff	mean_ss	mean_e	std_ss	std_e	mean_dif	std_dif	corr_SS
149	2017	calv	66	1667	1985	103.2	102.7	5.6	5.6	0.5	1.3	0.97
150	2018	calv	78	1347	1936	102.4	101.3	6.4	6.1	1.0	2.2	0.94
151	2019	calv	53	746	1273	103.3	101.4	4.9	4.7	1.9	2.7	0.84

HOL SS and traditional breeding value for nordic AI bulls with minimum 15 offspring

Obs	diff	d_brth	d_calv	p_brth	p_calv
1	-11	.	.	.	.
2	-10	.	.	.	.
3	-9	.	.	.	.
4	-8	1	1	0	0
5	-7	2	3	0	0
6	-6	14	4	1	0
7	-5	29	17	2	1
8	-4	48	28	4	2
9	-3	85	61	7	5
10	-2	145	103	12	9
11	-1	304	191	25	17
12	0	289	298	24	26
13	1	170	193	14	17
14	2	79	104	6	9
15	3	30	62	2	5
16	4	18	37	1	3
17	5	9	14	1	1
18	6	5	11	0	1
19	7	.	3	.	0
20	8	.	2	.	0
21	9	.	3	.	0
22	10	.	.	.	.
23	11	.	.	.	.
24	12	.	.	.	.

HOL SS and traditional breeding value for nordic AI bulls with minimum 15 offspring

Obs	diff	d_dSB1	d_dCE1	d_dCS1	d_dSB2	d_dCE2	d_dCS2
1	-11	.	.	.	.	.	.
2	-10	1	.	.	.	.	.
3	-9	1	.	1	.	.	1
4	-8	3	.	.	4	.	.
5	-7	10	.	1	9	1	.
6	-6	17	6	2	15	1	1
7	-5	33	2	3	34	2	2
8	-4	54	18	11	82	7	9
9	-3	96	65	29	117	30	12
10	-2	119	99	69	178	83	32
11	-1	291	254	193	216	265	202
12	0	269	470	392	230	572	479
13	1	164	187	201	168	188	250
14	2	88	82	81	99	61	43
15	3	40	31	24	40	20	8
16	4	22	9	17	17	4	7
17	5	13	3	1	15	3	.
18	6	3	1	1	6	.	.
19	7	3	.	.	5	.	.
20	8	1	.	.	2	.	.
21	9	.	.	.	2	.	.
22	10	.	.	.	.	.	.
23	11	.	.	.	.	.	.
24	12	.	.	.	.	.	.

HOL SS and traditional breeding value for nordic AI bulls with minimum 15 offspring

Obs	diff	d_mSB1	d_mCE1	d_mCS1	d_mSB2	d_mCE2	d_mCS2
1	-11	.	.	1	.	.	.
2	-10	1	.	.	.	.	3
3	-9	.	1	1	.	2	1
4	-8	2	.	7	4	.	2
5	-7	4	4	9	4	6	8
6	-6	10	2	13	9	4	6
7	-5	14	10	20	20	17	18
8	-4	36	21	37	40	21	31
9	-3	80	70	68	66	62	61
10	-2	105	84	84	91	90	86
11	-1	210	220	161	154	195	150
12	0	257	361	201	246	288	193
13	1	184	192	127	154	173	132
14	2	105	92	86	111	95	83
15	3	56	40	47	63	56	55
16	4	31	24	39	52	35	31
17	5	21	10	28	34	18	17
18	6	11	2	7	15	13	8
19	7	5	1	4	10	2	3
20	8	1	1	4	4	1	3
21	9	.	.	4	1	.	1
22	10	2	.	1	.	.	.
23	11	.	.	2	.	.	.
24	12	.	.	.	1	.	.

HOL SS and traditional breeding value for nordic AI bulls with minimum 15 offspring

Obs	diff	p_dSB1	p_dCE1	p_dCS1	p_dSB2	p_dCE2	p_dCS2
1	-11	.	.	.	.	.	.
2	-10	0	.	.	.	.	.
3	-9	0	.	0	.	.	0
4	-8	0	.	.	0	.	.
5	-7	1	.	0	1	0	.
6	-6	1	0	0	1	0	0
7	-5	3	0	0	3	0	0
8	-4	4	1	1	7	1	1
9	-3	8	5	3	9	2	1
10	-2	10	8	7	14	7	3
11	-1	24	21	19	17	21	19
12	0	22	38	38	19	46	46
13	1	13	15	20	14	15	24
14	2	7	7	8	8	5	4
15	3	3	3	2	3	2	1
16	4	2	1	2	1	0	1
17	5	1	0	0	1	0	.
18	6	0	0	0	0	.	.
19	7	0	.	.	0	.	.
20	8	0	.	.	0	.	.
21	9	.	.	.	0	.	.
22	10	.	.	.	.	.	.
23	11	.	.	.	.	.	.
24	12	.	.	.	.	.	.

HOL SS and traditional breeding value for nordic AI bulls with minimum 15 offspring

Obs	diff	p_mSB1	p_mCE1	p_mCS1	p_mSB2	p_mCE2	p_mCS2
1	-11	.	.	0	.	.	.
2	-10	0	.	.	.	.	0
3	-9	.	0	0	.	0	0
4	-8	0	.	1	0	.	0
5	-7	0	0	1	0	1	1
6	-6	1	0	1	1	0	1
7	-5	1	1	2	2	2	2
8	-4	3	2	4	4	2	3
9	-3	7	6	7	6	6	7
10	-2	9	7	9	8	8	10
11	-1	19	19	17	14	18	17
12	0	23	32	21	23	27	22
13	1	16	17	13	14	16	15
14	2	9	8	9	10	9	9
15	3	5	4	5	6	5	6
16	4	3	2	4	5	3	3
17	5	2	1	3	3	2	2
18	6	1	0	1	1	1	1
19	7	0	0	0	1	0	0
20	8	0	0	0	0	0	0
21	9	.	.	0	0	.	0
22	10	0	.	0	.	.	.
23	11	.	.	0	.	.	.
24	12	.	.	.	0	.	.

HOL SS and twostep breeding value for genotyped females without phenotype

Obs	BYR	name	no	mean_ss	mean_two	std_ss	std_two	mean_dif	std_dif	corr_SS
1	2019	brth	29616	100.1	99.6	5.5	4.9	0.5	3.4	0.79
2	2020	brth	34926	102.1	100.3	5.1	4.6	1.8	3.3	0.78
3	2021	brth	37186	102.9	100.4	4.8	4.4	2.5	3.2	0.77
4	2022	brth	40853	103.2	100.4	4.8	3.9	2.8	3.0	0.77
5	2023	brth	39412	103.7	100.5	4.6	3.8	3.3	3.0	0.76
6	2024	brth	3516	103.7	100.7	4.4	3.7	3.0	3.1	0.73
7	2019	calv	13934	99.4	99.7	5.6	5.1	-0.3	3.2	0.83
8	2020	calv	18226	100.6	100.7	5.6	5.0	-0.1	3.2	0.82
9	2021	calv	21888	100.8	101.3	5.5	4.9	-0.6	3.3	0.81
10	2022	calv	63013	102.0	101.9	5.3	4.8	0.0	3.2	0.80
11	2023	calv	69254	102.5	102.4	5.2	4.8	0.1	3.3	0.79
12	2024	calv	6218	103.4	103.0	5.3	4.8	0.4	3.4	0.78

HOL SS and twostep breeding value for genotyped females without phenotype

Obs	diff	d_brth	d_calv	p_brth	p_calv
1	-17	1	.	0	.
2	-14	2	5	0	0
3	-13	8	15	0	0
4	-12	10	25	0	0
5	-11	28	97	0	0
6	-10	65	269	0	0
7	-9	153	608	0	0
8	-8	319	1284	0	1
9	-7	648	2406	0	1
10	-6	1277	4492	1	2
11	-5	2105	7326	1	4
12	-4	3718	11098	2	6
13	-3	6119	15097	3	8
14	-2	9042	19430	5	10
15	-1	12996	22404	7	12
16	0	16997	23602	9	12
17	1	20405	22629	11	12
18	2	22452	19592	12	10
19	3	22287	15581	12	8
20	4	20347	10896	11	6
21	5	16811	7190	9	4
22	6	12138	4207	7	2
23	7	8135	2389	4	1
24	8	4794	1135	3	1
25	9	2611	473	1	0
26	10	1210	197	1	0
27	11	536	57	0	0
28	12	190	17	0	0
29	13	73	7	0	0
30	14	20	5	0	0
31	15	7	.	0	.
32	16	5	.	0	.

HOL SS and twostep breeding value for genotyped females with phenotype

Obs	BYR	name	no	mean_ss	mean_two	std_ss	std_two	mean_dif	std_dif	corr_SS
1	2015	brth	5350	98.5	98.9	5.2	5.2	-0.5	3.5	0.77
2	2016	brth	8390	100.0	100.1	5.3	5.2	-0.2	3.5	0.77
3	2017	brth	12386	101.2	100.6	5.3	5.2	0.6	3.5	0.78
4	2018	brth	17620	101.7	100.6	5.1	5.0	1.1	3.3	0.78
5	2019	brth	19515	101.4	100.4	5.3	5.0	1.0	3.4	0.78
6	2020	brth	24043	103.0	100.9	4.8	4.8	2.1	3.2	0.77
7	2021	brth	25649	103.5	100.9	4.6	4.6	2.7	3.2	0.77
8	2022	brth	29691	104.0	100.8	4.6	3.9	3.2	3.0	0.77
9	2023	brth	29842	104.1	100.8	4.4	3.7	3.3	2.9	0.75
10	2024	brth	2702	104.0	100.9	4.1	3.6	3.1	2.9	0.73
11	2015	calv	10646	95.5	96.3	6.1	5.8	-0.8	3.3	0.84
12	2016	calv	15795	96.7	97.3	6.1	5.9	-0.7	3.3	0.85
13	2017	calv	22764	97.8	98.3	6.1	5.9	-0.5	3.3	0.85
14	2018	calv	32060	99.2	99.5	5.9	5.7	-0.3	3.3	0.84
15	2019	calv	35197	100.0	100.4	5.8	5.6	-0.4	3.3	0.83
16	2020	calv	40743	101.1	101.5	5.6	5.4	-0.4	3.3	0.82
17	2021	calv	40947	101.2	102.2	5.6	5.4	-1.0	3.4	0.81
18	2022	calv	7531	102.0	102.5	5.4	5.1	-0.5	3.3	0.81

HOL SS and twostep breeding value for genotyped females with phenotype

Obs	diff	d_brth	d_calv	p_brth	p_calv
1	-19	.	1	.	0
2	-17	.	2	.	0
3	-16	.	4	.	0
4	-15	1	11	0	0
5	-14	2	12	0	0
6	-13	6	56	0	0
7	-12	15	107	0	0
8	-11	32	231	0	0
9	-10	96	518	0	0
10	-9	212	1022	0	0
11	-8	394	2155	0	1
12	-7	842	3892	0	2
13	-6	1475	6485	1	3
14	-5	2577	9923	1	5
15	-4	4147	14232	2	7
16	-3	6509	18736	4	9
17	-2	9412	22144	5	11
18	-1	12698	24602	7	12
19	0	15944	24463	9	12
20	1	19061	22087	11	11
21	2	20697	18462	12	9
22	3	20479	14103	12	7
23	4	18590	9620	11	5
24	5	15060	6065	9	3
25	6	11150	3497	6	2
26	7	7292	1780	4	1
27	8	4279	874	2	0
28	9	2300	358	1	0
29	10	1126	165	1	0
30	11	490	57	0	0
31	12	205	11	0	0
32	13	64	7	0	0
33	14	19	1	0	0
34	15	8	.	0	.
35	16	2	.	0	.
36	17	4	.	0	.

HOL SS and twostep breeding value for nordic AI bulls with minimum 15 offspring

Obs	BYR	name	no	mean_noff	std_noff	mean_ss	mean_two	std_ss	std_two	mean_dif	std_dif	corr_SS
1	2010	brth	193	874	2924	95.3	99.2	6.8	7.6	-3.9	2.7	0.93
2	2011	brth	154	462	1080	96.4	99.1	6.3	6.6	-2.7	2.4	0.93
3	2012	brth	170	732	1354	96.4	98.9	7.4	8.0	-2.5	2.4	0.95
4	2013	brth	151	761	1481	99.4	101.5	6.0	6.3	-2.1	2.3	0.93
5	2014	brth	114	1203	1565	99.4	100.6	6.4	6.6	-1.2	2.1	0.95
6	2015	brth	82	1845	2364	100.9	102.3	6.1	6.0	-1.4	2.0	0.94
7	2016	brth	65	1613	2133	99.4	101.2	6.4	6.7	-1.8	1.7	0.97
8	2017	brth	66	1798	2329	100.3	101.3	7.1	7.2	-1.0	1.5	0.98
9	2018	brth	78	1472	2300	101.1	101.3	5.6	5.8	-0.3	2.5	0.91
10	2019	brth	56	1572	2374	102.8	101.9	5.5	5.5	0.9	2.5	0.90
11	2020	brth	53	1413	1973	103.1	102.7	5.5	5.8	0.5	2.8	0.88
12	2021	brth	42	877	1250	103.9	101.9	4.5	4.9	2.0	2.7	0.83
13	2022	brth	4	139	149	104.0	104.4	6.5	2.4	-0.4	4.7	0.82
14	2010	calv	193	836	2597	95.1	95.3	7.6	7.7	-0.3	2.1	0.96
15	2011	calv	155	504	1062	95.6	96.0	7.6	7.4	-0.4	2.8	0.93
16	2012	calv	171	722	1279	96.1	96.3	6.7	6.9	-0.2	2.0	0.96
17	2013	calv	151	739	1345	97.2	98.0	7.1	6.5	-0.8	2.5	0.93
18	2014	calv	113	1115	1349	98.2	98.5	7.7	8.0	-0.3	2.0	0.97
19	2015	calv	83	1650	2045	100.4	101.0	6.3	5.8	-0.6	1.7	0.96
20	2016	calv	66	1583	2004	100.6	101.3	5.6	5.7	-0.7	1.8	0.95
21	2017	calv	66	1667	1985	103.2	103.7	5.6	5.9	-0.5	1.5	0.97
22	2018	calv	78	1347	1936	102.4	103.4	6.4	6.2	-1.0	2.5	0.92
23	2019	calv	53	746	1273	103.3	104.1	4.9	4.8	-0.8	2.3	0.89
24	2020	calv	6	32	13	103.5	102.7	4.2	4.9	0.8	1.8	0.93

HOL SS and twostep breeding value for nordic AI bulls with minimum 15 offspring

Obs	diff	d_brth	d_calv	p_brth	p_calv
1	.	.	1	.	.
2	-22	.	1	.	0
3	-21	.	1	.	0
4	-11	3	.	0	.
5	-10	4	.	0	.
6	-9	8	1	1	0
7	-8	17	1	1	0
8	-7	41	7	3	1
9	-6	44	9	4	1
10	-5	70	21	6	2
11	-4	114	32	9	3
12	-3	136	80	11	7
13	-2	206	146	17	13
14	-1	213	243	17	21
15	0	166	258	14	23
16	1	90	167	7	15
17	2	45	87	4	8
18	3	34	46	3	4
19	4	14	18	1	2
20	5	13	11	1	1
21	6	6	5	0	0
22	7	1	.	0	.
23	8	2	.	0	.
24	9	1	.	0	.

HOL SS and twostep breeding value for nordic AI bulls with no offspring

Obs	BYR	name	no	mean_noff	std_noff	mean_ss	mean_two	std_ss	std_two	mean_dif	std_dif	corr_SS
1	2019	brth	10	.	.	101.2	101.5	3.7	3.3	-0.3	2.6	0.73
2	2020	brth	10	.	.	101.6	100.5	6.3	4.6	1.1	4.2	0.74
3	2021	brth	5	.	.	102.8	101.1	3.6	3.8	1.7	1.6	0.91
4	2022	brth	50	.	.	104.3	102.2	4.3	3.2	2.0	2.6	0.79
5	2023	brth	34	.	.	105.3	102.3	3.2	2.6	3.0	2.6	0.61
6	2024	brth	1	.	.	111.0	107.2	.	.	3.8	.	.
7	2019	calv	13	.	.	103.9	103.4	4.7	4.9	0.5	2.1	0.90
8	2020	calv	54	.	.	101.9	102.5	5.9	4.4	-0.6	3.4	0.82
9	2021	calv	58	.	.	104.0	103.3	5.0	4.2	0.6	2.9	0.82
10	2022	calv	61	.	.	104.5	104.2	4.7	4.6	0.2	2.6	0.84
11	2023	calv	34	.	.	107.5	107.2	5.2	4.4	0.3	3.3	0.77
12	2024	calv	1	.	.	112.0	107.1	.	.	4.9	.	.

HOL SS and twostep breeding value for nordic AI bulls with no offspring

Obs	diff	d_brth	d_calv	p_brth	p_calv
1	-7	.	3	.	1
2	-6	1	4	1	2
3	-5	2	6	2	3
4	-4	1	10	1	5
5	-3	2	15	2	7
6	-2	5	32	5	14
7	-1	6	26	5	12
8	0	12	26	11	12
9	1	16	20	15	9
10	2	20	22	18	10
11	3	11	24	10	11
12	4	11	21	10	10
13	5	7	5	6	2
14	6	10	5	9	2
15	7	4	1	4	0
16	8	2	.	2	.
17	9	.	1	.	0

HOL SS and twostep breeding value for Nordic bulls with no offspring

Obs	BYR	name	no	mean_ss	mean_two	std_ss	std_two	mean_dif	std_dif	corr_SS
1	2020	brth	3094	103.0	101.0	4.9	3.8	1.9	3.1	0.77
2	2021	brth	3071	103.4	101.0	4.6	3.8	2.4	3.0	0.77
3	2022	brth	3222	103.8	101.1	4.6	3.8	2.8	3.0	0.76
4	2023	brth	3024	104.7	101.2	4.3	3.6	3.4	2.9	0.74
5	2024	brth	522	104.4	101.7	4.5	3.8	2.6	3.3	0.70
6	2020	calv	3221	101.3	101.6	5.4	4.8	-0.3	3.1	0.82
7	2021	calv	3222	102.3	102.5	5.4	4.9	-0.3	3.2	0.81
8	2022	calv	3257	102.8	102.6	5.2	4.9	0.2	3.1	0.81
9	2023	calv	3024	103.5	103.3	5.1	4.6	0.2	3.3	0.77
10	2024	calv	522	105.2	104.1	5.1	4.8	1.1	3.3	0.78

HOL SS and twostep breeding value for Nordic bulls with no offspring

Obs	diff	d_brth	d_calv	p_brth	p_calv
1	-13	.	1	.	0
2	-12	.	2	.	0
3	-11	.	4	.	0
4	-10	1	9	0	0
5	-9	.	38	.	0
6	-8	3	84	0	1
7	-7	16	168	0	1
8	-6	41	284	0	2
9	-5	84	474	1	4
10	-4	163	754	1	6
11	-3	308	1085	2	8
12	-2	569	1345	4	10
13	-1	799	1531	6	12
14	0	1136	1708	9	13
15	1	1401	1563	11	12
16	2	1732	1316	13	10
17	3	1610	994	12	8
18	4	1548	774	12	6
19	5	1288	528	10	4
20	6	913	314	7	2
21	7	600	144	5	1
22	8	363	84	3	1
23	9	211	26	2	0
24	10	96	10	1	0
25	11	29	3	0	0
26	12	14	3	0	0
27	13	6	.	0	.
28	15	2	.	0	.

HOL breeding values for SS full and SS reduc for nordic AI bulls with minimum 15 offspring in full

Obs	BYR	name	no	mean_noff	std_noff	mean_ss	mean_rss	std_ss	std_rss	mean_dif	std_dif	corr_SS
1	2010	dSB1	193	874	2924	96.4	97.1	7.3	7.6	-0.6	1.2	0.99
2	2011	dSB1	154	462	1080	97.4	97.9	6.8	6.9	-0.6	1.1	0.99
3	2012	dSB1	170	732	1354	97.0	97.3	8.2	8.2	-0.3	1.1	0.99
4	2013	dSB1	151	761	1481	100.7	100.9	6.9	7.1	-0.3	1.0	0.99
5	2014	dSB1	114	1203	1565	99.8	100.0	7.1	7.1	-0.2	1.2	0.99
6	2015	dSB1	82	1845	2364	101.9	102.2	7.3	7.6	-0.3	1.2	0.99
7	2016	dSB1	65	1613	2133	99.8	102.3	7.7	5.4	-2.5	6.0	0.63
8	2017	dSB1	66	1798	2329	100.6	101.5	7.8	6.9	-0.9	6.2	0.65
9	2018	dSB1	78	1472	2300	101.4	101.7	6.5	6.2	-0.3	5.1	0.68
10	2019	dSB1	56	1572	2374	103.2	102.6	6.4	5.1	0.6	5.7	0.54
11	2020	dSB1	53	1413	1973	103.2	104.4	6.0	5.0	-1.2	5.1	0.58
12	2021	dSB1	42	877	1250	104.4	103.4	4.9	5.1	1.0	4.2	0.64
13	2010	dCE1	193	768	2585	96.7	96.9	7.4	7.6	-0.2	1.0	0.99
14	2011	dCE1	154	402	946	97.1	97.4	6.7	6.8	-0.3	1.0	0.99
15	2012	dCE1	170	636	1194	98.4	98.6	7.5	7.6	-0.2	0.9	0.99
16	2013	dCE1	151	669	1328	101.0	101.1	6.4	6.7	-0.1	0.9	0.99
17	2014	dCE1	114	1072	1414	100.2	100.4	6.8	6.9	-0.1	0.9	0.99
18	2015	dCE1	82	1640	2124	101.7	102.0	4.6	4.8	-0.2	1.0	0.98
19	2016	dCE1	65	1426	1907	101.2	102.8	5.6	5.0	-1.6	4.9	0.58
20	2017	dCE1	66	1583	2063	101.4	101.7	5.7	5.5	-0.3	4.2	0.71
21	2018	dCE1	78	1288	2026	101.8	103.0	4.5	5.5	-1.2	4.7	0.58
22	2019	dCE1	56	1378	2083	103.1	104.0	4.3	4.4	-0.9	4.7	0.42
23	2020	dCE1	52	1258	1729	104.4	106.5	3.7	5.5	-2.2	4.4	0.60
24	2021	dCE1	42	763	1088	102.5	104.2	4.5	5.5	-1.7	4.2	0.67
25	2010	dCS1	143	684	2018	102.2	102.1	9.0	9.3	0.1	1.1	0.99
26	2011	dCS1	115	335	744	101.7	101.6	8.0	8.0	0.1	1.0	0.99
27	2012	dCS1	136	526	901	101.0	101.0	8.1	8.2	0.0	0.9	0.99
28	2013	dCS1	114	569	992	99.3	99.4	8.2	8.3	-0.1	1.0	0.99
29	2014	dCS1	103	865	1115	98.9	98.8	8.2	8.3	0.1	1.2	0.99
30	2015	dCS1	81	1158	1590	96.8	96.5	6.9	6.7	0.3	1.2	0.99
31	2016	dCS1	63	999	1413	97.7	97.4	7.2	6.1	0.3	6.0	0.61
32	2017	dCS1	66	1087	1556	96.9	98.1	7.6	7.0	-1.2	5.2	0.75
33	2018	dCS1	75	929	1503	97.6	97.6	6.6	6.8	0.0	5.5	0.66
34	2019	dCS1	53	1020	1525	96.1	96.6	5.4	5.2	-0.5	4.9	0.58
35	2020	dCS1	46	1022	1312	94.9	93.5	5.7	6.8	1.4	4.6	0.74
36	2021	dCS1	27	900	916	95.7	95.3	6.3	7.8	0.4	6.7	0.56
37	2010	dSB2	193	1308	3577	96.8	97.5	7.0	7.4	-0.7	1.2	0.99

HOL breeding values for SS full and SS reduc for nordic AI bulls with minimum 15 offspring in full

Obs	BYR	name	no	mean_noff	std_noff	mean_ss	mean_rss	std_ss	std_rss	mean_dif	std_dif	corr_SS
38	2011	dSB2	155	955	1868	98.1	98.5	7.1	7.2	-0.4	1.1	0.99
39	2012	dSB2	171	1329	2260	98.4	98.6	7.7	7.9	-0.2	1.2	0.99
40	2013	dSB2	151	1324	2257	100.2	100.1	6.4	6.5	0.0	1.3	0.98
41	2014	dSB2	114	1875	2196	101.7	101.3	7.1	7.4	0.4	1.4	0.98
42	2015	dSB2	83	2742	3068	102.0	101.3	6.2	6.3	0.6	1.3	0.98
43	2016	dSB2	66	2598	3067	101.5	102.6	6.4	5.1	-1.1	5.4	0.58
44	2017	dSB2	66	2675	2755	102.6	101.7	6.8	6.1	0.9	6.2	0.55
45	2018	dSB2	78	2404	2884	103.2	102.7	5.5	5.5	0.5	5.8	0.46
46	2019	dSB2	56	2336	2940	104.9	104.1	5.6	4.5	0.8	5.8	0.35
47	2020	dSB2	58	1719	2456	105.5	105.5	6.0	5.0	0.0	6.6	0.29
48	2021	dSB2	44	1227	1621	105.9	105.1	5.2	5.7	0.8	5.1	0.57
49	2010	dCE2	193	1137	3129	97.0	97.2	7.0	7.2	-0.2	0.8	0.99
50	2011	dCE2	155	832	1635	96.9	97.1	5.6	5.7	-0.1	0.9	0.99
51	2012	dCE2	171	1148	1971	98.2	98.5	6.5	6.5	-0.2	0.8	0.99
52	2013	dCE2	151	1156	1998	99.4	99.4	5.7	5.9	0.0	1.0	0.99
53	2014	dCE2	114	1652	1949	100.2	100.2	5.5	5.8	-0.1	1.0	0.98
54	2015	dCE2	82	2441	2707	101.4	101.5	4.0	4.3	0.0	0.8	0.99
55	2016	dCE2	66	2280	2692	100.8	101.4	4.6	4.4	-0.6	5.2	0.33
56	2017	dCE2	66	2346	2396	100.8	100.6	4.7	5.4	0.2	5.0	0.51
57	2018	dCE2	78	2094	2514	101.2	102.0	4.0	5.1	-0.9	4.4	0.54
58	2019	dCE2	56	2029	2550	102.7	102.4	4.0	4.3	0.3	4.4	0.44
59	2020	dCE2	57	1518	2141	102.8	104.8	3.4	5.2	-2.1	4.2	0.60
60	2021	dCE2	44	1062	1400	101.0	102.9	4.2	5.5	-1.9	4.5	0.60
61	2010	dCS2	143	1000	2255	102.7	102.5	8.4	8.5	0.2	0.6	1.00
62	2011	dCS2	116	727	1261	102.0	101.8	8.2	8.3	0.2	0.6	1.00
63	2012	dCS2	137	949	1400	101.5	101.4	7.8	7.9	0.1	0.7	1.00
64	2013	dCS2	114	990	1469	99.4	99.2	7.4	7.5	0.2	0.7	1.00
65	2014	dCS2	104	1267	1397	99.2	99.3	7.6	7.8	0.0	0.8	0.99
66	2015	dCS2	80	1679	1853	97.7	97.4	6.4	6.5	0.3	0.8	0.99
67	2016	dCS2	64	1547	1802	98.0	96.8	7.0	6.3	1.2	6.2	0.56
68	2017	dCS2	66	1552	1563	96.7	98.1	7.4	7.0	-1.4	4.5	0.80
69	2018	dCS2	77	1418	1694	96.9	97.4	7.3	6.9	-0.5	5.5	0.71
70	2019	dCS2	54	1399	1653	95.3	95.5	6.5	6.0	-0.2	4.9	0.69
71	2020	dCS2	50	1155	1490	94.0	93.3	6.2	6.2	0.7	4.6	0.73
72	2021	dCS2	37	940	1043	94.4	93.7	8.0	7.4	0.7	4.2	0.85
73	2010	mSB1	193	836	2597	96.3	96.2	8.1	8.0	0.0	1.3	0.99
74	2011	mSB1	155	504	1062	96.1	96.0	8.1	8.4	0.1	1.5	0.98

HOL breeding values for SS full and SS reduc for nordic AI bulls with minimum 15 offspring in full

Obs	BYR	name	no	mean_noff	std_noff	mean_ss	mean_rss	std_ss	std_rss	mean_dif	std_dif	corr_SS
75	2012	mSB1	171	722	1279	96.9	96.9	7.3	7.5	0.0	1.5	0.98
76	2013	mSB1	151	739	1345	98.4	98.2	7.3	7.2	0.2	2.0	0.96
77	2014	mSB1	113	1115	1349	98.5	98.2	8.6	7.2	0.3	3.1	0.94
78	2015	mSB1	83	1650	2045	101.3	101.4	6.8	6.2	-0.1	4.1	0.81
79	2016	mSB1	66	1583	2004	101.1	100.9	6.3	6.1	0.2	3.5	0.84
80	2017	mSB1	66	1667	1985	103.2	102.7	6.3	5.6	0.6	4.0	0.78
81	2018	mSB1	78	1347	1936	102.7	103.5	7.0	5.4	-0.8	4.3	0.78
82	2019	mSB1	53	746	1273	103.9	103.6	5.1	4.7	0.3	4.1	0.66
83	2010	mCE1	193	733	2302	96.4	96.7	7.5	7.9	-0.3	1.4	0.98
84	2011	mCE1	155	445	948	96.9	97.1	7.4	7.6	-0.1	1.5	0.98
85	2012	mCE1	171	640	1140	96.7	96.9	6.5	7.0	-0.2	1.8	0.97
86	2013	mCE1	151	653	1194	98.2	98.5	5.9	6.5	-0.3	2.6	0.91
87	2014	mCE1	113	984	1201	99.1	98.7	7.2	7.2	0.4	2.9	0.92
88	2015	mCE1	83	1450	1805	100.8	101.1	5.4	5.6	-0.3	4.6	0.65
89	2016	mCE1	66	1387	1763	101.8	102.0	5.4	6.1	-0.2	4.3	0.73
90	2017	mCE1	66	1456	1727	104.1	103.8	5.7	5.8	0.3	5.1	0.60
91	2018	mCE1	78	1160	1672	103.1	103.9	5.3	6.0	-0.9	4.5	0.69
92	2019	mCE1	53	645	1099	103.1	103.7	4.2	5.3	-0.6	4.6	0.56
93	2010	mCS1	143	667	1765	94.8	94.8	10.3	10.0	0.0	2.2	0.98
94	2011	mCS1	115	404	751	95.1	95.3	11.4	11.6	-0.2	2.0	0.99
95	2012	mCS1	137	542	842	94.8	95.4	9.0	9.1	-0.6	2.7	0.96
96	2013	mCS1	114	562	872	96.2	97.3	10.3	10.2	-1.1	2.8	0.96
97	2014	mCS1	104	759	878	98.4	99.3	9.5	9.6	-0.9	4.3	0.90
98	2015	mCS1	80	1010	1268	98.6	101.4	8.2	8.3	-2.8	6.1	0.72
99	2016	mCS1	63	974	1219	96.6	98.1	9.6	8.4	-1.5	7.2	0.69
100	2017	mCS1	66	990	1237	100.3	101.5	8.7	7.0	-1.1	7.4	0.58
101	2018	mCS1	75	845	1214	100.2	101.8	8.0	6.8	-1.6	6.2	0.66
102	2019	mCS1	49	515	824	101.9	104.1	9.5	7.4	-2.2	7.8	0.60
103	2010	mSB2	193	626	1950	94.0	94.0	7.6	7.7	0.0	2.4	0.95
104	2011	mSB2	155	382	808	95.7	96.0	7.9	8.1	-0.3	3.0	0.93
105	2012	mSB2	171	553	981	96.0	96.5	6.9	7.2	-0.5	3.6	0.87
106	2013	mSB2	151	566	1034	95.9	96.2	7.6	7.3	-0.3	4.7	0.80
107	2014	mSB2	113	862	1046	98.8	97.7	7.2	7.0	1.1	4.5	0.80
108	2015	mSB2	82	1260	1540	99.6	99.9	7.4	6.0	-0.3	6.5	0.55
109	2016	mSB2	65	1155	1452	100.2	99.9	5.8	5.5	0.3	5.3	0.55
110	2017	mSB2	66	1054	1274	103.4	102.7	5.6	5.8	0.7	5.7	0.51
111	2018	mSB2	75	514	835	102.1	102.9	6.3	5.8	-0.8	5.4	0.60

HOL breeding values for SS full and SS reduc for nordic AI bulls with minimum 15 offspring in full

Obs	BYR	name	no	mean_noff	std_noff	mean_ss	mean_rss	std_ss	std_rss	mean_dif	std_dif	corr_SS
112	2010	mCE2	193	567	1775	95.1	95.2	7.3	7.6	-0.1	2.1	0.96
113	2011	mCE2	155	347	736	96.7	97.0	6.9	7.1	-0.3	2.4	0.94
114	2012	mCE2	171	500	889	96.5	97.0	5.4	6.1	-0.5	3.3	0.84
115	2013	mCE2	151	510	934	97.0	97.5	6.0	6.5	-0.5	4.1	0.78
116	2014	mCE2	113	772	943	99.6	99.0	6.1	6.9	0.6	4.3	0.79
117	2015	mCE2	82	1118	1370	100.1	99.9	5.3	6.3	0.2	5.8	0.51
118	2016	mCE2	65	1017	1280	100.9	100.2	4.7	6.5	0.6	6.3	0.41
119	2017	mCE2	66	915	1100	103.4	102.9	4.2	6.2	0.5	6.2	0.35
120	2018	mCE2	74	445	720	102.9	102.8	4.4	6.2	0.2	5.7	0.48
121	2010	mCS2	143	503	1314	92.9	92.8	9.9	9.8	0.2	2.3	0.97
122	2011	mCS2	114	306	564	93.8	94.1	10.4	10.4	-0.3	3.0	0.96
123	2012	mCS2	137	408	632	94.8	95.0	9.1	9.4	-0.2	3.7	0.92
124	2013	mCS2	114	423	659	95.7	96.3	9.7	9.8	-0.6	4.1	0.91
125	2014	mCS2	103	582	669	96.6	97.5	9.0	8.6	-0.9	5.3	0.82
126	2015	mCS2	79	758	930	98.6	101.3	8.6	8.5	-2.8	6.0	0.75
127	2016	mCS2	62	691	855	96.7	97.7	9.5	8.5	-1.0	6.6	0.74
128	2017	mCS2	66	610	771	100.1	101.8	7.3	6.9	-1.7	6.6	0.58
129	2018	mCS2	66	362	530	100.0	101.3	7.4	6.7	-1.3	6.5	0.58
130	2010	brth	193	874	2924	96.2	96.9	6.9	7.1	-0.7	1.1	0.99
131	2011	brth	154	462	1080	97.3	97.7	6.4	6.4	-0.4	0.9	0.99
132	2012	brth	170	732	1354	97.3	97.6	7.4	7.5	-0.3	1.0	0.99
133	2013	brth	151	761	1481	100.3	100.4	6.1	6.2	-0.1	1.0	0.99
134	2014	brth	114	1203	1565	100.3	100.3	6.5	6.6	0.1	1.1	0.99
135	2015	brth	82	1845	2364	101.9	101.8	6.2	6.3	0.1	0.9	0.99
136	2016	brth	65	1613	2133	100.3	102.4	6.4	4.8	-2.0	5.4	0.58
137	2017	brth	66	1798	2329	101.2	101.5	7.2	6.5	-0.4	6.0	0.62
138	2018	brth	78	1472	2300	102.0	102.1	5.8	5.8	-0.1	4.9	0.65
139	2019	brth	56	1572	2374	103.8	103.3	5.6	4.6	0.5	5.3	0.48
140	2020	brth	53	1413	1973	104.1	105.2	5.6	4.9	-1.1	5.3	0.49
141	2021	brth	42	877	1250	104.9	104.3	4.5	5.4	0.7	4.1	0.67
142	2010	calv	193	836	2597	95.2	95.1	7.8	7.8	0.0	1.4	0.98
143	2011	calv	155	504	1062	95.7	95.7	7.7	8.0	0.0	1.7	0.98
144	2012	calv	171	722	1279	96.3	96.4	6.9	7.2	-0.2	2.1	0.96
145	2013	calv	151	739	1345	97.4	97.3	7.2	7.0	0.0	2.6	0.93
146	2014	calv	113	1115	1349	98.4	97.9	8.0	7.1	0.5	3.0	0.93
147	2015	calv	83	1650	2045	100.6	100.8	6.4	5.8	-0.1	4.6	0.72
148	2016	calv	66	1583	2004	100.9	100.6	5.7	5.8	0.3	3.4	0.82

HOL breeding values for SS full and SS reduc for nordic AI bulls with minimum 15 offspring in full

Obs	BYR	name	no	mean_noff	std_noff	mean_ss	mean_rss	std_ss	std_rss	mean_dif	std_dif	corr_SS
149	2017	calv	66	1667	1985	103.5	102.7	5.8	5.3	0.7	4.1	0.73
150	2018	calv	78	1347	1936	102.7	103.4	6.6	5.5	-0.7	4.5	0.73
151	2019	calv	53	746	1273	103.5	103.3	5.0	5.0	0.2	4.4	0.61

HOL changes for SS full and SS reduc for nordic AI bulls with minimum 15 offspring in full, born >=2015

Obs	diff	d_brth	d_calv	p_brth	p_calv
1	-23	.	.	.	.
2	-22	.	.	.	.
3	-21	.	.	.	.
4	-20	.	.	.	.
5	-19	.	.	.	.
6	-18	.	.	.	.
7	-17	1	.	0	.
8	-16	1	.	0	.
9	-15	.	.	.	.
10	-14	1	.	0	.
11	-13	1	.	0	.
12	-12	3	3	1	1
13	-11	3	1	1	0
14	-10	9	3	2	1
15	-9	10	3	2	1
16	-8	6	8	1	2
17	-7	6	7	1	2
18	-6	18	5	4	1
19	-5	17	13	4	4
20	-4	26	25	6	7
21	-3	21	18	5	5
22	-2	32	34	7	10
23	-1	37	37	8	11
24	0	77	41	17	12
25	1	49	30	11	9
26	2	19	15	4	4
27	3	26	32	6	9
28	4	18	30	4	9
29	5	16	17	4	5
30	6	19	12	4	3
31	7	4	6	1	2
32	8	10	4	2	1
33	9	6	2	1	1
34	10	6	3	1	1
35	11	2	2	0	1
36	12	1	1	0	0

HOL changes for SS full and SS reduc for nordic AI bulls with minimum 15 offspring in full, born >=2015

Obs	diff	d_brth	d_calv	p_brth	p_calv
37	13	1	.	0	.
38	14	.	.	.	.
39	15	.	.	.	.
40	16	.	.	.	.
41	17	.	.	.	.
42	18	.	.	.	.
43	19	.	.	.	.
44	20	.	.	.	.

HOL changes for SS full and SS reduc for nordic AI bulls with minimum 15 offspring in full, born >=2015

Obs	diff	d_dSB1	d_dCE1	d_dCS1	d_dSB2	d_dCE2	d_dCS2
1	-23	1	.	.	.	.	.
2	-22	.	.	.	.	.	.
3	-21	.	.	.	.	.	.
4	-20	.	.	.	.	.	.
5	-19	.	.	1	.	.	.
6	-18	.	.	.	.	.	.
7	-17	1	.	.	.	.	.
8	-16	.	1	.	.	.	.
9	-15	.	.	.	.	.	1
10	-14	3	.	.	3	.	1
11	-13	3	1	.	1	2	2
12	-12	4	2	1	4	2	2
13	-11	4	2	4	4	6	1
14	-10	4	11	5	7	5	3
15	-9	8	9	7	7	8	6
16	-8	11	12	8	10	7	11
17	-7	13	11	12	11	13	11
18	-6	14	22	17	14	12	15
19	-5	16	15	17	16	14	17
20	-4	22	25	23	18	30	23
21	-3	38	26	15	28	23	17
22	-2	26	31	28	22	39	24
23	-1	45	57	35	38	45	29
24	0	57	73	64	56	90	75
25	1	38	41	41	40	39	43
26	2	35	33	28	33	34	31
27	3	20	19	25	25	25	35
28	4	22	19	12	26	17	27
29	5	11	13	17	19	14	14
30	6	15	11	15	14	8	6
31	7	13	4	5	14	6	14
32	8	6	5	11	17	5	9
33	9	7	2	11	11	3	6
34	10	5	.	5	5	.	2
35	11	1	.	3	5	3	3
36	12	1	.	2	3	1	3

HOL changes for SS full and SS reduc for nordic AI bulls with minimum 15 offspring in full, born >=2015

Obs	diff	d_dSB1	d_dCE1	d_dCS1	d_dSB2	d_dCE2	d_dCS2
37	13	.	.	2	1	1	.
38	14	2	.	1	.	.	.
39	15	.	.	.	2	.	.
40	16	.	.	.	.	.	.
41	17	.	.	.	1	1	.
42	18	.	.	.	.	.	1
43	19	.	.	.	.	.	.
44	20	.	.	.	.	.	.

HOL changes for SS full and SS reduc for nordic AI bulls with minimum 15 offspring in full, born >=2015

Obs	diff	d_mSB1	d_mCE1	d_mCS1	d_mSB2	d_mCE2	d_mCS2
1	-23	.	.	.	.	.	.
2	-22	.	.	1	.	.	.
3	-21	.	.	1	.	.	.
4	-20	.	.	.	.	.	1
5	-19	.	.	1	.	.	.
6	-18	.	.	1	.	.	.
7	-17	.	.	1	.	.	1
8	-16	.	.	2	.	.	3
9	-15	.	.	4	2	1	2
10	-14	.	.	5	.	1	5
11	-13	1	1	5	3	.	3
12	-12	.	3	6	1	3	2
13	-11	1	3	8	7	2	11
14	-10	4	5	5	3	3	8
15	-9	3	4	18	5	5	7
16	-8	5	6	13	3	11	16
17	-7	6	10	11	11	10	11
18	-6	6	13	15	18	17	11
19	-5	16	12	18	18	10	14
20	-4	20	26	16	13	16	18
21	-3	23	23	23	16	22	19
22	-2	32	35	25	20	18	14
23	-1	44	26	17	18	12	11
24	0	37	36	12	25	16	24
25	1	33	32	21	14	23	12
26	2	26	25	23	19	22	15
27	3	28	25	15	20	13	14
28	4	26	19	18	18	15	9
29	5	13	16	12	17	20	13
30	6	10	8	9	9	11	6
31	7	4	10	7	6	11	14
32	8	10	7	2	6	10	7
33	9	.	2	5	8	8	3
34	10	2	2	6	2	6	1
35	11	2	.	3	8	.	2
36	12	.	1	1	3	3	2

HOL changes for SS full and SS reduc for nordic AI bulls with minimum 15 offspring in full, born >=2015

Obs	diff	d_mSB1	d_mCE1	d_mCS1	d_mSB2	d_mCE2	d_mCS2
37	13	.	1	.	2	1	1
38	14	.	.	4	1	1	1
39	15	.	.	2	.	.	.
40	16	.	.	1	.	1	.
41	17	.	.	.	.	2	.
42	18	.	1	.	.	.	.
43	19	.	.	1	.	.	.
44	20	.	.	.	.	1	.

HOL changes for SS full and SS reduc for nordic AI bulls with minimum 15 offspring in full, born >=2015

Obs	diff	p_dSB1	p_dCE1	p_dCS1	p_dSB2	p_dCE2	p_dCS2
1	-23	0	.	.	.	.	.
2	-22	.	.	.	.	.	.
3	-21	.	.	.	.	.	.
4	-20	.	.	.	.	.	.
5	-19	.	.	0	.	.	.
6	-18	.	.	.	.	.	.
7	-17	0	.	.	.	.	.
8	-16	.	0	.	.	.	.
9	-15	.	.	.	.	.	0
10	-14	1	.	.	1	.	0
11	-13	1	0	.	0	0	0
12	-12	1	0	0	1	0	0
13	-11	1	0	1	1	1	0
14	-10	1	2	1	2	1	1
15	-9	2	2	2	2	2	1
16	-8	2	3	2	2	2	3
17	-7	3	2	3	2	3	3
18	-6	3	5	4	3	3	3
19	-5	4	3	4	4	3	4
20	-4	5	6	6	4	7	5
21	-3	9	6	4	6	5	4
22	-2	6	7	7	5	9	6
23	-1	10	13	8	8	10	7
24	0	13	16	15	12	20	17
25	1	9	9	10	9	9	10
26	2	8	7	7	7	8	7
27	3	4	4	6	5	6	8
28	4	5	4	3	6	4	6
29	5	2	3	4	4	3	3
30	6	3	2	4	3	2	1
31	7	3	1	1	3	1	3
32	8	1	1	3	4	1	2
33	9	2	0	3	2	1	1
34	10	1	.	1	1	.	0
35	11	0	.	1	1	1	1
36	12	0	.	0	1	0	1

HOL changes for SS full and SS reduc for nordic AI bulls with minimum 15 offspring in full, born >=2015

Obs	diff	p_dSB1	p_dCE1	p_dCS1	p_dSB2	p_dCE2	p_dCS2
37	13	.	.	0	0	0	.
38	14	0	.	0	.	.	.
39	15	.	.	.	0	.	.
40	16	.	.	.	.	.	.
41	17	.	.	.	0	0	.
42	18	.	.	.	.	.	0
43	19	.	.	.	.	.	.
44	20	.	.	.	.	.	.

HOL changes for SS full and SS reduc for nordic AI bulls with minimum 15 offspring in full, born >=2015

Obs	diff	p_mSB1	p_mCE1	p_mCS1	p_mSB2	p_mCE2	p_mCS2
1	-23	.	.	.	.	.	.
2	-22	.	.	0	.	.	.
3	-21	.	.	0	.	.	.
4	-20	.	.	.	.	.	0
5	-19	.	.	0	.	.	.
6	-18	.	.	0	.	.	.
7	-17	.	.	0	.	.	0
8	-16	.	.	1	.	.	1
9	-15	.	.	1	1	0	1
10	-14	.	.	1	.	0	2
11	-13	0	0	1	1	.	1
12	-12	.	1	2	0	1	1
13	-11	0	1	2	2	1	4
14	-10	1	1	1	1	1	3
15	-9	1	1	5	2	2	2
16	-8	1	2	4	1	4	6
17	-7	2	3	3	4	3	4
18	-6	2	4	4	6	6	4
19	-5	5	3	5	6	3	5
20	-4	6	7	5	4	5	6
21	-3	7	7	7	5	7	7
22	-2	9	10	7	7	6	5
23	-1	13	7	5	6	4	4
24	0	11	10	4	8	5	9
25	1	9	9	6	5	8	4
26	2	7	7	7	6	7	5
27	3	8	7	4	7	4	5
28	4	7	5	5	6	5	3
29	5	4	5	4	6	7	5
30	6	3	2	3	3	4	2
31	7	1	3	2	2	4	5
32	8	3	2	1	2	3	2
33	9	.	1	1	3	3	1
34	10	1	1	2	1	2	0
35	11	1	.	1	3	.	1
36	12	.	0	0	1	1	1

HOL changes for SS full and SS reduc for nordic AI bulls with minimum 15 offspring in full, born >=2015

Obs	diff	p_mSB1	p_mCE1	p_mCS1	p_mSB2	p_mCE2	p_mCS2
37	13	.	0	.	1	0	0
38	14	.	.	1	0	0	0
39	15	.	.	1	.	.	.
40	16	.	.	0	.	0	.
41	17	.	.	.	.	1	.
42	18	.	0	.	.	.	.
43	19	.	.	0	.	.	.
44	20	.	.	.	.	0	.

HOL breeding values for traditional full and reduc for nordic AI bulls with minimum 15 offspring in full

Obs	BYR	name	no	mean_noff	std_noff	mean_e	mean_re	std_e	std_re	mean_dif	std_dif	corr_SS
1	2010	dSB1	193	874	2924	98.5	98.6	7.8	7.8	-0.1	0.5	1.00
2	2011	dSB1	154	462	1080	98.3	98.3	7.1	7.1	0.0	0.6	1.00
3	2012	dSB1	170	732	1354	98.0	98.0	8.4	8.4	0.1	0.6	1.00
4	2013	dSB1	151	761	1481	101.2	100.9	7.2	7.3	0.3	0.8	0.99
5	2014	dSB1	114	1203	1565	100.2	100.0	7.2	7.2	0.2	1.0	0.99
6	2015	dSB1	82	1845	2364	102.2	101.8	7.6	7.7	0.3	1.1	0.99
7	2016	dSB1	65	1613	2133	100.2	100.0	7.9	5.3	0.2	7.4	0.43
8	2017	dSB1	66	1798	2329	100.9	100.0	8.3	6.8	0.9	7.9	0.48
9	2018	dSB1	78	1472	2300	100.9	99.1	6.4	5.5	1.8	6.0	0.50
10	2019	dSB1	56	1572	2374	101.7	98.7	6.4	4.7	3.0	6.7	0.29
11	2020	dSB1	53	1413	1973	101.6	99.1	6.2	4.2	2.5	6.0	0.39
12	2021	dSB1	42	877	1250	103.0	99.2	5.1	3.3	3.7	5.7	0.14
13	2010	dCE1	193	768	2585	97.3	97.4	7.6	7.6	0.0	0.5	1.00
14	2011	dCE1	154	402	946	97.5	97.5	7.2	7.2	-0.1	0.5	1.00
15	2012	dCE1	170	636	1194	98.6	98.6	7.8	7.8	0.0	0.5	1.00
16	2013	dCE1	151	669	1328	101.1	101.0	6.8	6.9	0.1	0.6	1.00
17	2014	dCE1	114	1072	1414	100.2	100.1	6.9	7.0	0.1	0.7	0.99
18	2015	dCE1	82	1640	2124	101.9	101.9	4.8	4.9	0.0	0.8	0.99
19	2016	dCE1	65	1426	1907	101.3	100.5	5.7	4.3	0.8	5.6	0.40
20	2017	dCE1	66	1583	2063	101.6	100.3	5.7	4.7	1.3	5.4	0.47
21	2018	dCE1	78	1288	2026	101.3	100.7	4.6	4.1	0.6	4.8	0.40
22	2019	dCE1	56	1378	2083	102.3	100.4	4.6	3.3	1.9	5.1	0.22
23	2020	dCE1	52	1258	1729	103.3	100.7	3.5	3.3	2.6	4.5	0.14
24	2021	dCE1	42	763	1088	101.8	100.7	4.5	2.5	1.1	4.8	0.12
25	2010	dCS1	143	684	2018	102.2	102.1	9.0	9.1	0.1	0.5	1.00
26	2011	dCS1	115	335	744	101.9	101.7	8.2	8.3	0.2	0.6	1.00
27	2012	dCS1	136	526	901	101.2	101.2	8.5	8.5	0.0	0.6	1.00
28	2013	dCS1	114	569	992	99.4	99.5	8.5	8.6	-0.1	0.6	1.00
29	2014	dCS1	103	865	1115	99.1	99.2	8.3	8.5	0.0	1.1	0.99
30	2015	dCS1	81	1158	1590	97.1	97.1	6.9	6.9	0.0	1.0	0.99
31	2016	dCS1	63	999	1413	98.1	99.7	7.3	5.2	-1.6	7.6	0.31
32	2017	dCS1	66	1087	1556	97.5	100.3	7.8	5.7	-2.8	6.8	0.52
33	2018	dCS1	75	929	1503	98.5	100.1	6.8	5.0	-1.6	7.3	0.26
34	2019	dCS1	53	1020	1525	97.0	100.4	5.5	3.5	-3.4	5.7	0.25
35	2020	dCS1	46	1022	1312	96.2	100.4	5.3	3.9	-4.2	5.9	0.20
36	2021	dCS1	27	900	916	97.0	99.8	5.9	2.7	-2.9	5.9	0.23
37	2010	dSB2	193	1308	3577	98.6	98.7	7.6	7.7	-0.1	0.6	1.00

HOL breeding values for traditional full and reduc for nordic AI bulls with minimum 15 offspring in full

Obs	BYR	name	no	mean_noff	std_noff	mean_e	mean_re	std_e	std_re	mean_dif	std_dif	corr_SS
38	2011	dSB2	155	955	1868	98.8	98.9	7.3	7.3	-0.1	0.7	1.00
39	2012	dSB2	171	1329	2260	98.8	98.8	8.3	8.4	0.0	0.9	0.99
40	2013	dSB2	151	1324	2257	100.0	99.9	7.0	7.0	0.1	1.2	0.99
41	2014	dSB2	114	1875	2196	101.2	100.9	7.0	7.2	0.3	1.2	0.99
42	2015	dSB2	83	2742	3068	101.6	100.8	6.4	6.5	0.8	1.5	0.97
43	2016	dSB2	66	2598	3067	101.2	100.5	6.6	5.3	0.7	6.7	0.39
44	2017	dSB2	66	2675	2755	102.0	100.1	7.2	5.5	1.9	7.6	0.32
45	2018	dSB2	78	2404	2884	101.8	100.1	5.7	4.5	1.7	6.3	0.26
46	2019	dSB2	56	2336	2940	102.2	99.8	5.6	3.9	2.4	6.1	0.20
47	2020	dSB2	58	1719	2456	102.7	99.7	6.5	3.4	3.0	6.5	0.26
48	2021	dSB2	44	1227	1621	103.3	100.5	5.4	2.8	2.9	6.0	0.01
49	2010	dCE2	193	1137	3129	97.6	97.6	7.4	7.5	0.0	0.5	1.00
50	2011	dCE2	155	832	1635	97.0	97.1	5.9	6.0	-0.1	0.5	1.00
51	2012	dCE2	171	1148	1971	98.3	98.5	6.8	6.8	-0.1	0.6	1.00
52	2013	dCE2	151	1156	1998	99.4	99.4	6.0	6.1	0.0	0.7	0.99
53	2014	dCE2	114	1652	1949	100.3	100.2	5.8	6.0	0.1	0.9	0.99
54	2015	dCE2	82	2441	2707	101.6	101.6	4.2	4.5	0.1	0.8	0.99
55	2016	dCE2	66	2280	2692	101.1	100.5	4.7	4.1	0.6	5.9	0.09
56	2017	dCE2	66	2346	2396	101.1	99.7	4.8	4.2	1.4	5.4	0.27
57	2018	dCE2	78	2094	2514	101.2	100.4	4.2	3.5	0.8	4.8	0.24
58	2019	dCE2	56	2029	2550	102.7	100.3	4.2	2.8	2.4	4.8	0.12
59	2020	dCE2	57	1518	2141	102.4	100.0	3.1	2.6	2.3	3.5	0.25
60	2021	dCE2	44	1062	1400	100.7	100.7	4.7	2.2	0.0	4.5	0.32
61	2010	dCS2	143	1000	2255	102.5	102.5	8.4	8.5	0.0	0.4	1.00
62	2011	dCS2	116	727	1261	101.9	101.7	8.3	8.4	0.2	0.5	1.00
63	2012	dCS2	137	949	1400	101.8	101.6	7.8	8.0	0.1	0.5	1.00
64	2013	dCS2	114	990	1469	99.9	99.7	7.5	7.7	0.2	0.6	1.00
65	2014	dCS2	104	1267	1397	99.8	99.8	7.5	7.7	0.0	0.6	1.00
66	2015	dCS2	80	1679	1853	98.3	98.1	6.5	6.6	0.2	0.6	1.00
67	2016	dCS2	64	1547	1802	98.8	100.0	7.1	5.1	-1.2	7.3	0.33
68	2017	dCS2	66	1552	1563	97.2	100.3	7.5	4.8	-3.1	6.0	0.60
69	2018	dCS2	77	1418	1694	98.0	100.6	7.4	4.4	-2.6	7.4	0.29
70	2019	dCS2	54	1399	1653	96.9	100.5	6.5	3.5	-3.6	6.2	0.37
71	2020	dCS2	50	1155	1490	95.7	100.9	6.3	3.3	-5.1	6.4	0.23
72	2021	dCS2	37	940	1043	96.6	100.0	7.4	2.7	-3.4	7.2	0.26
73	2010	mSB1	193	836	2597	96.3	96.4	7.8	7.8	-0.1	1.1	0.99
74	2011	mSB1	155	504	1062	96.1	96.1	8.0	8.1	0.0	1.1	0.99

HOL breeding values for traditional full and reduc for nordic AI bulls with minimum 15 offspring in full

Obs	BYR	name	no	mean_noff	std_noff	mean_e	mean_re	std_e	std_re	mean_dif	std_dif	corr_SS
75	2012	mSB1	171	722	1279	96.7	96.4	7.3	7.4	0.2	1.5	0.98
76	2013	mSB1	151	739	1345	97.9	97.5	6.9	6.9	0.4	2.0	0.96
77	2014	mSB1	113	1115	1349	97.7	96.6	8.8	7.5	1.1	3.2	0.93
78	2015	mSB1	83	1650	2045	100.1	98.9	6.7	5.4	1.1	4.5	0.75
79	2016	mSB1	66	1583	2004	99.9	97.8	6.2	4.7	2.1	3.7	0.80
80	2017	mSB1	66	1667	1985	102.0	98.8	6.1	5.0	3.2	4.4	0.70
81	2018	mSB1	78	1347	1936	100.7	99.3	6.6	3.6	1.5	5.5	0.55
82	2019	mSB1	53	746	1273	101.5	99.0	4.6	2.8	2.5	4.9	0.18
83	2010	mCE1	193	733	2302	96.4	96.7	7.7	7.9	-0.2	1.1	0.99
84	2011	mCE1	155	445	948	97.0	97.2	7.6	7.7	-0.3	1.3	0.99
85	2012	mCE1	171	640	1140	96.6	96.5	6.6	7.1	0.1	1.8	0.97
86	2013	mCE1	151	653	1194	98.0	97.9	6.2	6.7	0.2	2.8	0.91
87	2014	mCE1	113	984	1201	99.1	97.6	7.5	7.6	1.5	3.5	0.90
88	2015	mCE1	83	1450	1805	100.5	99.3	5.7	6.0	1.1	5.4	0.58
89	2016	mCE1	66	1387	1763	101.3	99.4	5.4	4.8	1.9	4.3	0.66
90	2017	mCE1	66	1456	1727	103.4	99.7	5.4	4.9	3.7	5.3	0.48
91	2018	mCE1	78	1160	1672	102.1	100.2	5.2	4.4	1.9	5.3	0.40
92	2019	mCE1	53	645	1099	101.7	99.5	4.4	4.2	2.1	5.3	0.24
93	2010	mCS1	143	667	1765	94.7	94.6	10.3	10.3	0.1	1.5	0.99
94	2011	mCS1	115	404	751	95.3	95.3	11.6	11.9	0.1	1.5	0.99
95	2012	mCS1	137	542	842	93.9	94.4	8.9	9.1	-0.5	2.4	0.97
96	2013	mCS1	114	562	872	95.9	96.4	10.3	10.2	-0.5	3.2	0.95
97	2014	mCS1	104	759	878	98.0	99.0	9.8	9.7	-0.9	4.8	0.88
98	2015	mCS1	80	1010	1268	98.1	100.7	8.8	7.9	-2.6	6.8	0.67
99	2016	mCS1	63	974	1219	96.1	98.1	10.0	7.6	-2.0	8.3	0.58
100	2017	mCS1	66	990	1237	99.7	100.4	8.7	5.6	-0.7	8.6	0.33
101	2018	mCS1	75	845	1214	98.9	98.9	7.6	4.8	0.0	7.5	0.33
102	2019	mCS1	49	515	824	100.7	100.9	9.1	4.0	-0.2	8.4	0.39
103	2010	mSB2	193	626	1950	94.1	94.0	7.7	7.8	0.1	2.0	0.97
104	2011	mSB2	155	382	808	95.6	95.9	8.2	8.3	-0.3	2.7	0.95
105	2012	mSB2	171	553	981	95.9	96.2	7.2	7.0	-0.3	3.7	0.86
106	2013	mSB2	151	566	1034	95.3	95.2	7.7	7.2	0.1	4.9	0.78
107	2014	mSB2	113	862	1046	98.2	96.0	7.5	7.3	2.3	5.3	0.75
108	2015	mSB2	82	1260	1540	99.0	97.7	7.8	5.9	1.3	7.2	0.47
109	2016	mSB2	65	1155	1452	99.1	96.9	6.5	4.7	2.3	5.8	0.51
110	2017	mSB2	66	1054	1274	102.7	98.0	6.1	5.8	4.7	6.4	0.42
111	2018	mSB2	75	514	835	101.1	98.2	5.9	4.3	2.9	5.8	0.39

HOL breeding values for traditional full and reduc for nordic AI bulls with minimum 15 offspring in full

Obs	BYR	name	no	mean_noff	std_noff	mean_e	mean_re	std_e	std_re	mean_dif	std_dif	corr_SS
112	2010	mCE2	193	567	1775	94.9	94.8	7.9	8.0	0.1	1.9	0.97
113	2011	mCE2	155	347	736	96.7	97.0	7.4	7.6	-0.3	2.7	0.94
114	2012	mCE2	171	500	889	96.5	96.7	5.9	6.6	-0.2	3.5	0.85
115	2013	mCE2	151	510	934	96.5	96.8	6.8	7.0	-0.2	4.9	0.75
116	2014	mCE2	113	772	943	99.6	97.8	6.7	7.1	1.8	5.5	0.68
117	2015	mCE2	82	1118	1370	99.9	98.3	5.5	6.3	1.5	6.5	0.40
118	2016	mCE2	65	1017	1280	100.7	98.3	5.0	5.4	2.3	6.6	0.20
119	2017	mCE2	66	915	1100	102.8	98.7	4.4	4.8	4.1	5.7	0.22
120	2018	mCE2	74	445	720	102.3	98.9	4.6	5.1	3.4	5.9	0.27
121	2010	mCS2	143	503	1314	93.1	92.8	9.7	9.8	0.3	2.0	0.98
122	2011	mCS2	114	306	564	93.8	93.7	10.4	10.5	0.1	2.8	0.96
123	2012	mCS2	137	408	632	93.8	94.2	9.2	9.2	-0.4	3.8	0.92
124	2013	mCS2	114	423	659	94.9	95.1	9.7	9.6	-0.1	4.8	0.87
125	2014	mCS2	103	582	669	95.8	96.9	9.3	8.0	-1.1	5.7	0.79
126	2015	mCS2	79	758	930	97.5	100.0	8.9	7.9	-2.5	6.4	0.71
127	2016	mCS2	62	691	855	95.7	96.9	9.0	7.2	-1.2	8.2	0.50
128	2017	mCS2	66	610	771	98.8	100.2	7.6	5.7	-1.4	7.4	0.41
129	2018	mCS2	66	362	530	98.4	98.6	7.2	4.7	-0.2	7.0	0.37
130	2010	brth	193	874	2924	98.2	98.2	7.4	7.3	-0.1	0.5	1.00
131	2011	brth	154	462	1080	98.1	98.1	6.6	6.6	0.0	0.6	1.00
132	2012	brth	170	732	1354	98.1	98.1	7.9	7.8	0.0	0.6	1.00
133	2013	brth	151	761	1481	100.6	100.4	6.5	6.6	0.2	0.8	0.99
134	2014	brth	114	1203	1565	100.4	100.2	6.5	6.6	0.3	0.9	0.99
135	2015	brth	82	1845	2364	101.9	101.5	6.4	6.5	0.4	1.1	0.99
136	2016	brth	65	1613	2133	100.5	100.1	6.8	4.9	0.4	6.6	0.39
137	2017	brth	66	1798	2329	101.2	99.9	7.6	6.1	1.3	7.5	0.41
138	2018	brth	78	1472	2300	101.2	99.4	5.8	5.0	1.8	5.6	0.47
139	2019	brth	56	1572	2374	102.0	99.0	5.4	4.2	3.0	6.0	0.26
140	2020	brth	53	1413	1973	102.2	99.3	5.9	3.9	2.9	5.8	0.36
141	2021	brth	42	877	1250	103.0	99.6	4.9	3.0	3.4	5.3	0.16
142	2010	calv	193	836	2597	95.3	95.2	7.6	7.7	0.0	1.2	0.99
143	2011	calv	155	504	1062	95.6	95.7	7.9	8.0	-0.1	1.4	0.98
144	2012	calv	171	722	1279	96.1	96.0	7.0	7.0	0.1	2.1	0.96
145	2013	calv	151	739	1345	96.9	96.5	7.0	6.8	0.4	2.7	0.92
146	2014	calv	113	1115	1349	97.8	96.2	8.2	7.4	1.5	3.4	0.91
147	2015	calv	83	1650	2045	99.7	98.4	6.5	5.2	1.3	5.1	0.65
148	2016	calv	66	1583	2004	99.7	97.4	5.8	4.5	2.3	3.6	0.79

HOL breeding values for traditional full and reduc for nordic AI bulls with minimum 15 offspring in full

Obs	BYR	name	no	mean_noff	std_noff	mean_e	mean_re	std_e	std_re	mean_dif	std_dif	corr_SS
149	2017	calv	66	1667	1985	102.4	98.4	5.7	5.0	4.0	4.6	0.64
150	2018	calv	78	1347	1936	100.9	98.8	6.2	3.7	2.1	5.4	0.49
151	2019	calv	53	746	1273	101.1	98.4	4.7	3.0	2.7	5.2	0.13

HOL changes for EBV full and EBV reduc for nordic AI bulls with minimum 15 offspring in full, born >=2015

Obs	diff	d_brth	d_calv	p_brth	p_calv
1	-25	.	.	.	.
2	-22	.	.	.	.
3	-21	.	.	.	.
4	-20	.	.	.	.
5	-19	.	.	.	.
6	-18	.	.	.	.
7	-17	1	.	0	.
8	-16	.	.	.	.
9	-15	1	.	0	.
10	-14	3	.	1	.
11	-13	2	1	0	0
12	-12	3	2	1	1
13	-11	5	.	1	.
14	-10	4	1	1	0
15	-9	5	2	1	1
16	-8	9	5	2	1
17	-7	8	3	2	1
18	-6	9	6	2	2
19	-5	8	6	2	2
20	-4	8	9	2	3
21	-3	14	20	3	6
22	-2	9	15	2	4
23	-1	28	14	6	4
24	0	63	33	14	9
25	1	51	26	11	7
26	2	30	35	7	10
27	3	27	32	6	9
28	4	23	26	5	7
29	5	28	27	6	8
30	6	17	25	4	7
31	7	21	20	5	6
32	8	19	15	4	4
33	9	20	8	4	2
34	10	10	4	2	1
35	11	4	5	1	1
36	12	4	3	1	1

HOL changes for EBV full and EBV reduc for nordic AI bulls with minimum 15 offspring in full, born >=2015

Obs	diff	d_brth	d_calv	p_brth	p_calv
37	13	7	3	2	1
38	14	.	2	.	1
39	15	2	2	0	1
40	16	.	.	.	.
41	17	2	1	0	0
42	18	.	1	.	0
43	19	1	.	0	.
44	20	.	.	.	.
45	21	.	.	.	.
46	22	.	.	.	.
47	23	.	.	.	.
48	24	.	.	.	.

HOL changes for EBV full and EBV reduc for nordic AI bulls with minimum 15 offspring in full, born >=2015

Obs	diff	d_dSB1	d_dCE1	d_dCS1	d_dSB2	d_dCE2	d_dCS2
1	-25	.	.	.	.	.	.
2	-22	.	.	.	.	.	.
3	-21	1	.	.	.	.	1
4	-20	.	.	1	.	.	1
5	-19	.	.	.	.	.	.
6	-18	.	.	.	1	.	4
7	-17	1	.	1	1	1	3
8	-16	.	1	6	1	.	3
9	-15	1	1	4	.	.	3
10	-14	3	1	6	5	2	5
11	-13	3	2	4	1	.	7
12	-12	3	1	8	2	.	10
13	-11	5	.	9	1	1	13
14	-10	6	3	11	5	3	6
15	-9	6	3	17	6	4	15
16	-8	8	12	12	7	7	15
17	-7	6	7	19	10	10	15
18	-6	9	8	20	10	7	24
19	-5	13	7	16	14	11	27
20	-4	11	9	21	13	14	27
21	-3	12	17	17	12	22	14
22	-2	20	20	24	25	11	24
23	-1	23	37	32	26	43	22
24	0	60	87	54	36	76	65
25	1	48	48	38	41	48	49
26	2	28	31	23	43	33	13
27	3	21	25	19	32	33	16
28	4	24	25	9	28	29	8
29	5	23	26	12	17	30	7
30	6	19	20	7	22	24	5
31	7	18	19	1	19	16	7
32	8	17	11	2	18	9	3
33	9	15	11	3	13	9	2
34	10	14	8	3	10	3	6
35	11	5	1	1	12	3	1
36	12	7	3	5	8	2	2

HOL changes for EBV full and EBV reduc for nordic AI bulls with minimum 15 offspring in full, born >=2015

Obs	diff	d_dSB1	d_dCE1	d_dCS1	d_dSB2	d_dCE2	d_dCS2
37	13	4	.	6	5	.	4
38	14	5	.	3	6	.	1
39	15	2	1	.	2	.	1
40	16	2	.	1	3	.	2
41	17	.	.	.	.	1	.
42	18	1	.	.	.	.	1
43	19	1	.	.	.	1	.
44	20	1	.	.	.	.	.
45	21	.	.	.	.	.	.
46	22	.	.	.	.	.	.
47	23	.	.	.	.	.	.
48	24	.	.	.	.	.	.

HOL changes for EBV full and EBV reduc for nordic AI bulls with minimum 15 offspring in full, born >=2015

Obs	diff	d_mSB1	d_mCE1	d_mCS1	d_mSB2	d_mCE2	d_mCS2
1	-25	.	.	1	.	.	.
2	-22	.	.	.	.	.	1
3	-21	.	.	.	.	.	.
4	-20	.	.	.	.	.	1
5	-19	.	.	.	.	.	1
6	-18	.	.	3	.	.	1
7	-17	.	.	2	1	.	3
8	-16	.	.	1	1	.	4
9	-15	.	.	3	1	.	3
10	-14	.	.	5	.	2	2
11	-13	.	.	7	.	1	5
12	-12	1	.	12	2	.	7
13	-11	1	1	8	3	.	5
14	-10	5	2	14	.	2	2
15	-9	2	1	3	5	5	10
16	-8	4	4	9	3	7	9
17	-7	3	10	13	7	5	13
18	-6	6	8	17	8	5	15
19	-5	6	10	21	10	13	12
20	-4	11	10	17	10	5	17
21	-3	16	20	15	5	14	15
22	-2	20	24	11	19	11	17
23	-1	20	25	17	13	19	15
24	0	28	15	24	21	14	9
25	1	22	28	16	21	14	12
26	2	39	32	17	18	24	14
27	3	36	29	16	17	16	18
28	4	33	23	14	20	22	13
29	5	26	18	12	13	14	9
30	6	20	23	10	9	18	13
31	7	15	15	9	15	24	5
32	8	13	19	2	20	13	9
33	9	12	10	12	8	14	5
34	10	1	8	3	13	7	4
35	11	7	5	3	10	6	4
36	12	.	5	2	8	6	2

HOL changes for EBV full and EBV reduc for nordic AI bulls with minimum 15 offspring in full, born >=2015

Obs	diff	d_mSB1	d_mCE1	d_mCS1	d_mSB2	d_mCE2	d_mCS2
37	13	2	2	4	4	2	2
38	14	1	.	.	4	4	1
39	15	1	1	3	.	3	1
40	16	.	1	3	4	.	1
41	17	.	2	3	2	.	.
42	18	1	.	.	.	2	.
43	19	.	.	2	.	.	.
44	20	.	.	1	.	1	1
45	21	.	1	2	.	.	.
46	22	.	.	.	.	1	.
47	23	.	.	1	1	.	.
48	24	.	.	.	.	1	.

HOL changes for EBV full and EBV reduc for nordic AI bulls with minimum 15 offspring in full, born >=2015

Obs	diff	p_dSB1	p_dCE1	p_dCS1	p_dSB2	p_dCE2	p_dCS2
1	-25	.	.	.	.	.	.
2	-22	.	.	.	.	.	.
3	-21	0	.	.	.	.	0
4	-20	.	.	0	.	.	0
5	-19	.	.	.	.	.	.
6	-18	.	.	.	0	.	1
7	-17	0	.	0	0	0	1
8	-16	.	0	1	0	.	1
9	-15	0	0	1	.	.	1
10	-14	1	0	1	1	0	1
11	-13	1	0	1	0	.	2
12	-12	1	0	2	0	.	2
13	-11	1	.	2	0	0	3
14	-10	1	1	3	1	1	1
15	-9	1	1	4	1	1	3
16	-8	2	3	3	2	2	3
17	-7	1	2	5	2	2	3
18	-6	2	2	5	2	2	6
19	-5	3	2	4	3	2	6
20	-4	2	2	5	3	3	6
21	-3	3	4	4	3	5	3
22	-2	4	4	6	5	2	6
23	-1	5	8	8	6	9	5
24	0	13	20	13	8	17	15
25	1	11	11	9	9	11	11
26	2	6	7	6	9	7	3
27	3	5	6	5	7	7	4
28	4	5	6	2	6	6	2
29	5	5	6	3	4	7	2
30	6	4	4	2	5	5	1
31	7	4	4	0	4	4	2
32	8	4	2	0	4	2	1
33	9	3	2	1	3	2	0
34	10	3	2	1	2	1	1
35	11	1	0	0	3	1	0
36	12	2	1	1	2	0	0

HOL changes for EBV full and EBV reduc for nordic AI bulls with minimum 15 offspring in full, born >=2015

Obs	diff	p_dSB1	p_dCE1	p_dCS1	p_dSB2	p_dCE2	p_dCS2
37	13	1	.	1	1	.	1
38	14	1	.	1	1	.	0
39	15	0	0	.	0	.	0
40	16	0	.	0	1	.	0
41	17	.	.	.	.	0	.
42	18	0	.	.	.	.	0
43	19	0	.	.	.	0	.
44	20	0	.	.	.	.	.
45	21	.	.	.	.	.	.
46	22	.	.	.	.	.	.
47	23	.	.	.	.	.	.
48	24	.	.	.	.	.	.

HOL changes for EBV full and EBV reduc for nordic AI bulls with minimum 15 offspring in full, born >=2015

Obs	diff	p_mSB1	p_mCE1	p_mCS1	p_mSB2	p_mCE2	p_mCS2
1	-25	.	.	0	.	.	.
2	-22	.	.	.	.	.	0
3	-21	.	.	.	.	.	.
4	-20	.	.	.	.	.	0
5	-19	.	.	.	.	.	0
6	-18	.	.	1	.	.	0
7	-17	.	.	1	0	.	1
8	-16	.	.	0	0	.	1
9	-15	.	.	1	0	.	1
10	-14	.	.	1	.	1	1
11	-13	.	.	2	.	0	2
12	-12	0	.	4	1	.	2
13	-11	0	0	2	1	.	2
14	-10	1	1	4	.	1	1
15	-9	1	0	1	2	2	4
16	-8	1	1	3	1	2	3
17	-7	1	3	4	2	2	5
18	-6	2	2	5	3	2	5
19	-5	2	3	6	3	4	4
20	-4	3	3	5	3	2	6
21	-3	5	6	4	2	5	5
22	-2	6	7	3	6	4	6
23	-1	6	7	5	4	6	5
24	0	8	4	7	7	5	3
25	1	6	8	5	7	5	4
26	2	11	9	5	6	8	5
27	3	10	8	5	6	5	6
28	4	9	7	4	7	7	5
29	5	7	5	4	4	5	3
30	6	6	7	3	3	6	5
31	7	4	4	3	5	8	2
32	8	4	5	1	7	4	3
33	9	3	3	4	3	5	2
34	10	0	2	1	4	2	1
35	11	2	1	1	3	2	1
36	12	.	1	1	3	2	1

HOL changes for EBV full and EBV reduc for nordic AI bulls with minimum 15 offspring in full, born >=2015

Obs	diff	p_mSB1	p_mCE1	p_mCS1	p_mSB2	p_mCE2	p_mCS2
37	13	1	1	1	1	1	1
38	14	0	.	.	1	1	0
39	15	0	0	1	.	1	0
40	16	.	0	1	1	.	0
41	17	.	1	1	1	.	.
42	18	0	.	.	.	1	.
43	19	.	.	1	.	.	.
44	20	.	.	0	.	0	0
45	21	.	0	1	.	.	.
46	22	.	.	.	.	0	.
47	23	.	.	0	0	.	.
48	24	.	.	.	.	0	.

HOL Legarra Reverter regression for SS for bulls, born after 2015 and with minimum 15 offspring in full and no offspring in reduc

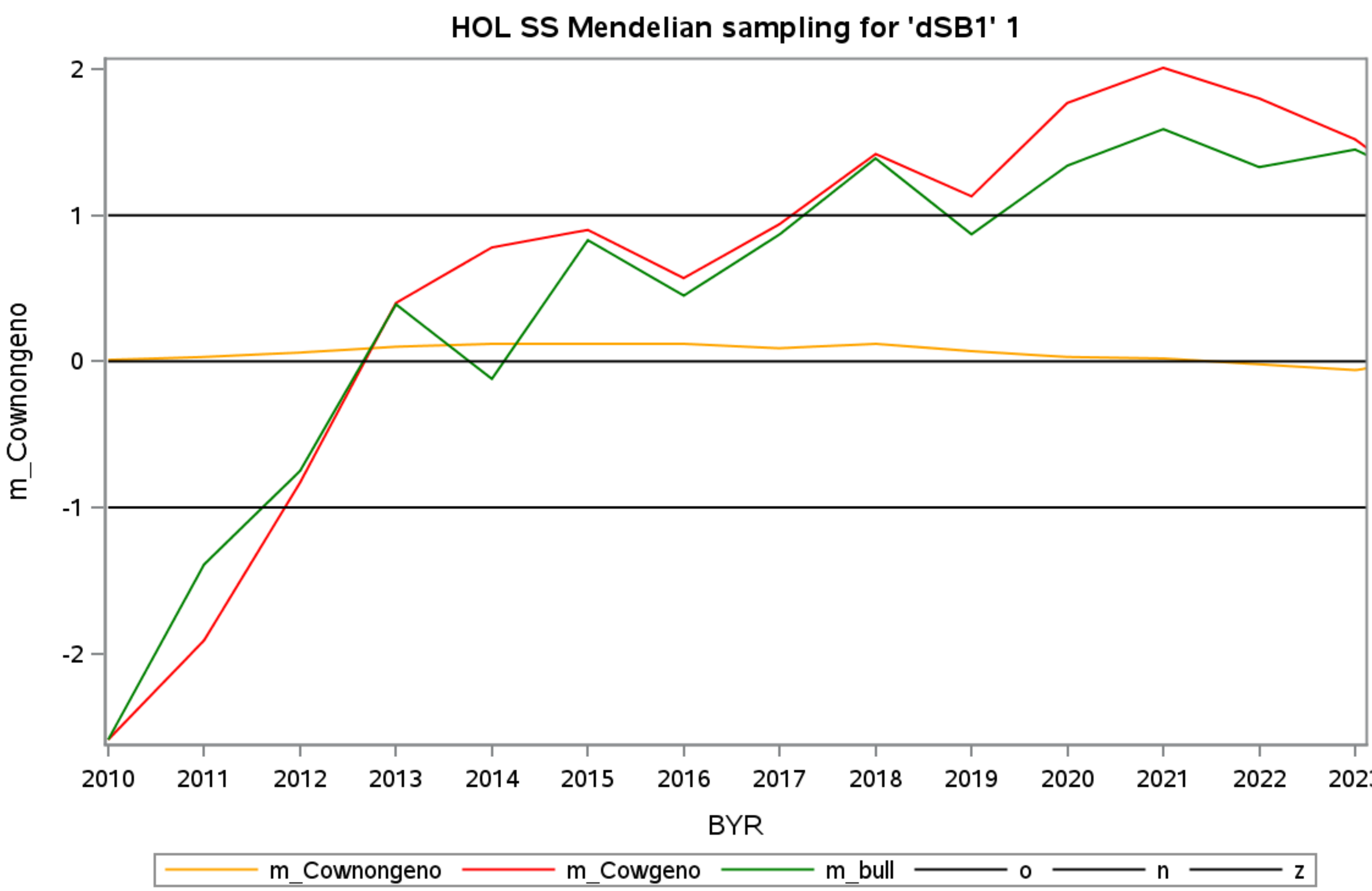
Obs	status	t	name	no	b1	rsq
1	1&2	1	dSB1	1118	0.75	0.43
2	1&2	2	dCE1	1078	0.68	0.48
3	1&2	3	dCS1	881	0.74	0.48
4	1&2	4	dSB2	1250	0.67	0.35
5	1&2	5	dCE2	1225	0.53	0.32
6	1&2	6	dCS2	1039	0.80	0.55
7	1&2	7	mSB1	740	0.89	0.67
8	1&2	8	mCE1	705	0.64	0.50
9	1&2	9	mCS1	594	0.81	0.48
10	1&2	10	mSB2	493	0.68	0.41
11	1&2	11	mCE2	462	0.44	0.27
12	1&2	12	mCS2	377	0.74	0.48
13	1&2	13	brth	1118	0.71	0.41
14	1&2	14	calv	740	0.85	0.63

HOL Legarra Reverter regression for EBV for bulls, born after 2015 and with minimum 15 offspring in full and no offspring in reduc

Obs	status	t	name	no	b1	rsq
1	1&2	1	dSB1	1118	0.61	0.17
2	1&2	2	dCE1	1078	0.59	0.15
3	1&2	3	dCS1	881	0.66	0.16
4	1&2	4	dSB2	1250	0.51	0.10
5	1&2	5	dCE2	1225	0.38	0.06
6	1&2	6	dCS2	1039	0.76	0.18
7	1&2	7	mSB1	740	0.82	0.36
8	1&2	8	mCE1	705	0.62	0.25
9	1&2	9	mCS1	594	0.78	0.24
10	1&2	10	mSB2	493	0.65	0.21
11	1&2	11	mCE2	462	0.34	0.10
12	1&2	12	mCS2	377	0.70	0.26
13	1&2	13	brth	1118	0.58	0.15
14	1&2	14	calv	740	0.77	0.32

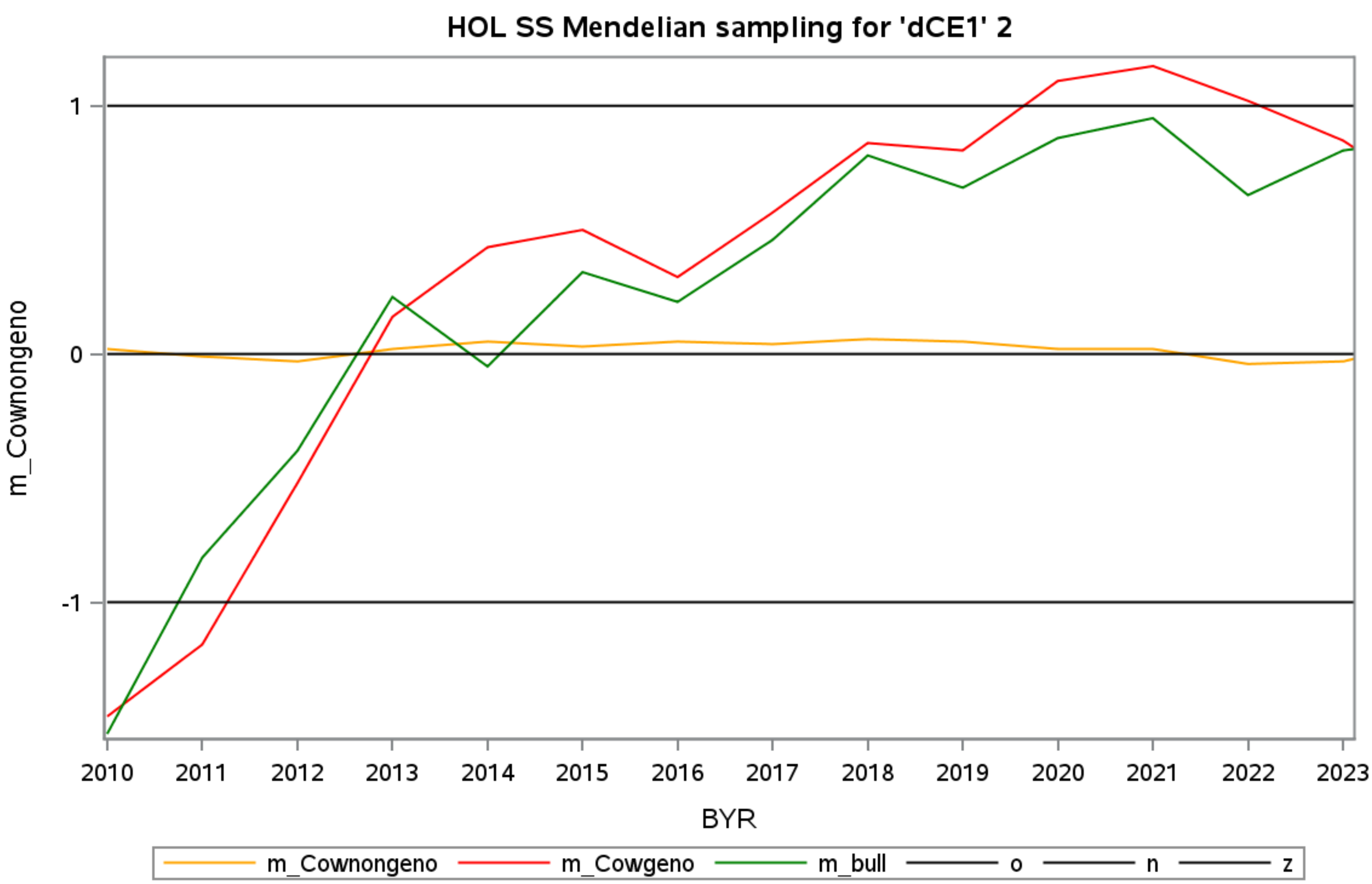
HOL SS Mendelian sampling for 'dSB1' 1

Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	0.01	-2.59	-2.59	185792	1079	563
2	2011	0.03	-1.91	-1.39	186302	2262	883
3	2012	0.06	-0.83	-0.75	183568	3596	1260
4	2013	0.10	0.40	0.39	179341	5780	1367
5	2014	0.12	0.78	-0.12	179249	6083	1494
6	2015	0.12	0.90	0.83	172005	8224	1632
7	2016	0.12	0.57	0.45	168838	14058	2032
8	2017	0.09	0.94	0.87	146822	21674	2169
9	2018	0.12	1.42	1.39	128423	29955	2067
10	2019	0.07	1.13	0.87	121352	34580	2229
11	2020	0.03	1.77	1.34	115989	40629	2088
12	2021	0.02	2.01	1.59	91930	34529	1605
13	2022	-0.02	1.80	1.33	73347	34750	1612
14	2023	-0.06	1.52	1.45	73015	36964	1779
15	2024	0.04	1.04	1.14	19706	8979	617



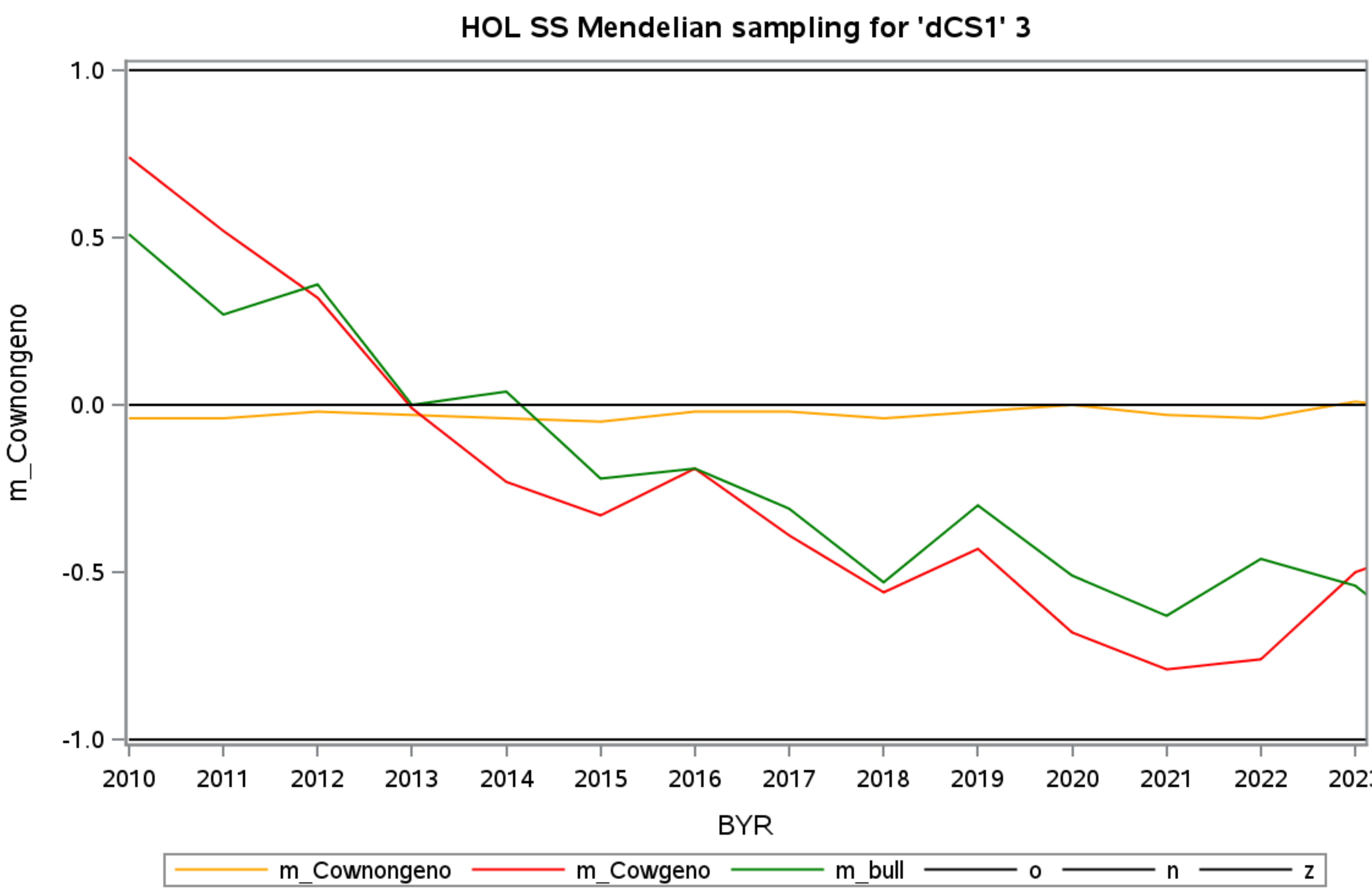
HOL SS Mendelian sampling for 'dCE1' 2

Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	0.02	-1.46	-1.53	185792	1079	563
2	2011	-0.01	-1.17	-0.82	186302	2262	883
3	2012	-0.03	-0.52	-0.39	183568	3596	1260
4	2013	0.02	0.15	0.23	179341	5780	1367
5	2014	0.05	0.43	-0.05	179249	6083	1494
6	2015	0.03	0.50	0.33	172005	8224	1632
7	2016	0.05	0.31	0.21	168838	14058	2032
8	2017	0.04	0.57	0.46	146822	21674	2169
9	2018	0.06	0.85	0.80	128423	29955	2067
10	2019	0.05	0.82	0.67	121352	34580	2229
11	2020	0.02	1.10	0.87	115989	40629	2088
12	2021	0.02	1.16	0.95	91930	34529	1605
13	2022	-0.04	1.02	0.64	73347	34750	1612
14	2023	-0.03	0.86	0.82	73015	36964	1779
15	2024	0.06	0.61	0.87	19706	8979	617



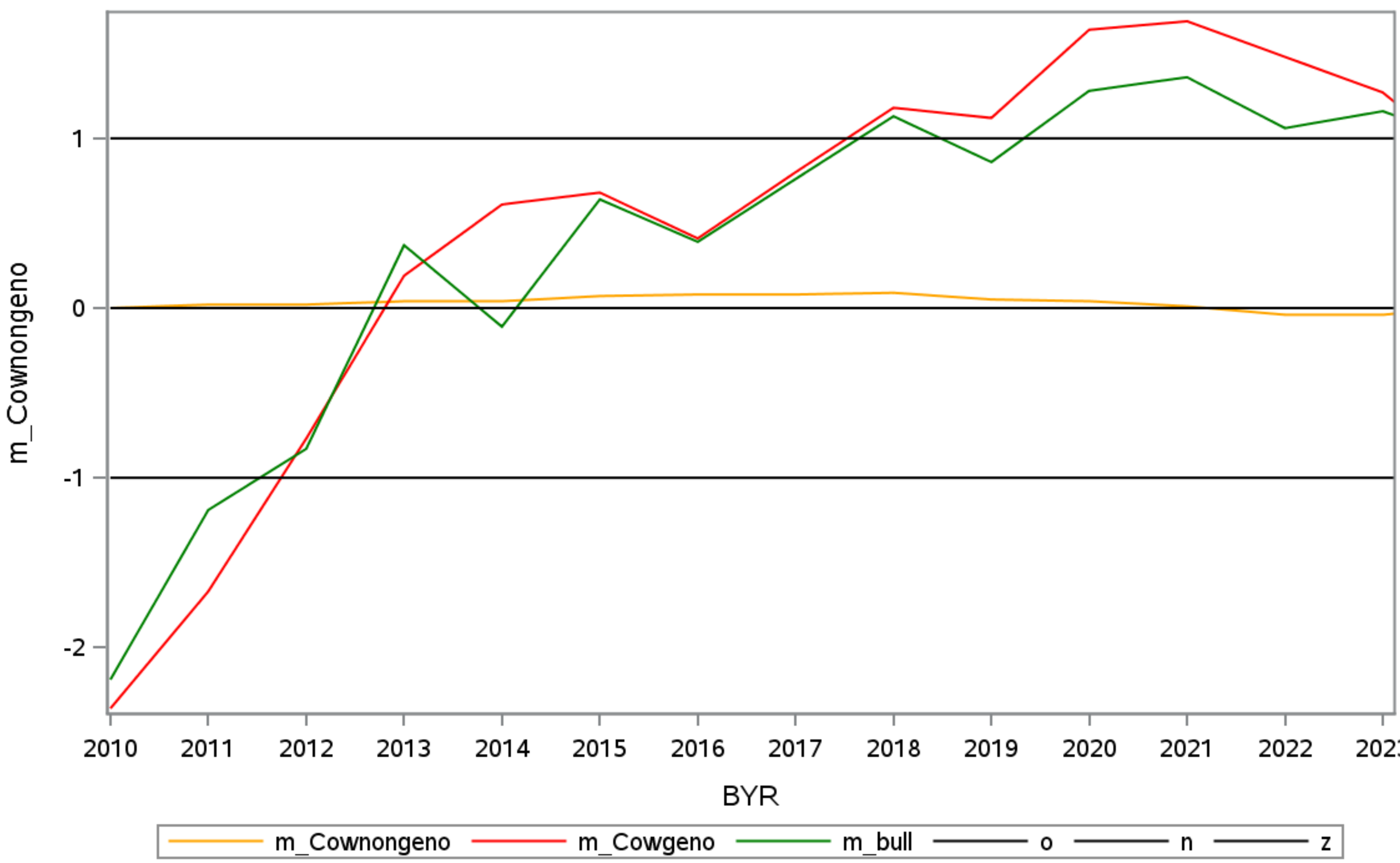
HOL SS Mendelian sampling for 'dCS1' 3

Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	-0.04	0.74	0.51	185792	1079	563
2	2011	-0.04	0.52	0.27	186302	2262	883
3	2012	-0.02	0.32	0.36	183568	3596	1260
4	2013	-0.03	-0.01	0.00	179341	5780	1367
5	2014	-0.04	-0.23	0.04	179249	6083	1494
6	2015	-0.05	-0.33	-0.22	172005	8224	1632
7	2016	-0.02	-0.19	-0.19	168838	14058	2032
8	2017	-0.02	-0.39	-0.31	146822	21674	2169
9	2018	-0.04	-0.56	-0.53	128423	29955	2067
10	2019	-0.02	-0.43	-0.30	121352	34580	2229
11	2020	0.00	-0.68	-0.51	115989	40629	2088
12	2021	-0.03	-0.79	-0.63	91930	34529	1605
13	2022	-0.04	-0.76	-0.46	73347	34750	1612
14	2023	0.01	-0.50	-0.54	73015	36964	1779
15	2024	-0.02	-0.40	-0.76	19706	8979	617

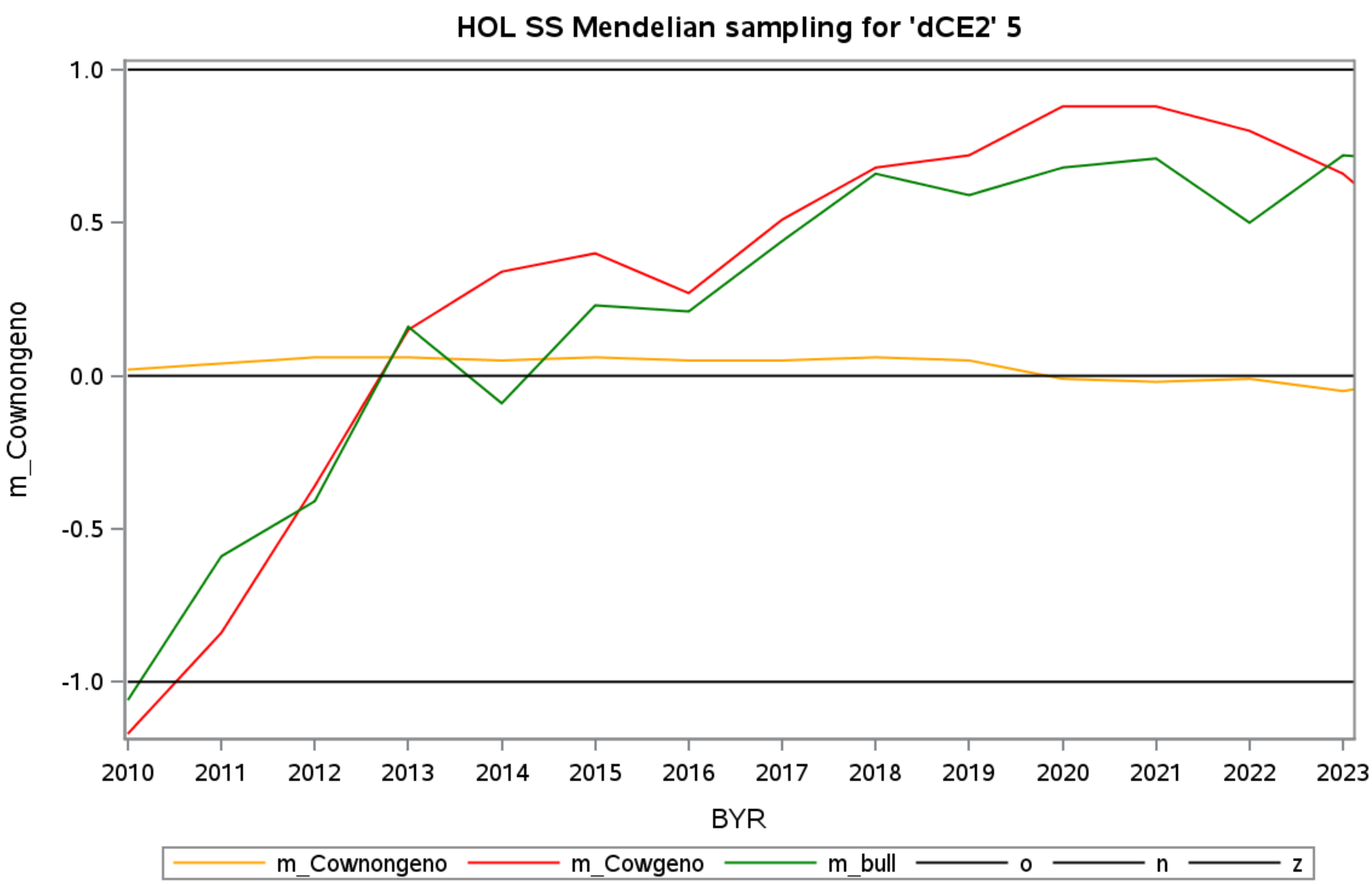


Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	0.00	-2.36	-2.19	185792	1079	563
2	2011	0.02	-1.67	-1.19	186302	2262	883
3	2012	0.02	-0.77	-0.83	183568	3596	1260
4	2013	0.04	0.19	0.37	179341	5780	1367
5	2014	0.04	0.61	-0.11	179249	6083	1494
6	2015	0.07	0.68	0.64	172005	8224	1632
7	2016	0.08	0.41	0.39	168838	14058	2032
8	2017	0.08	0.80	0.76	146822	21674	2169
9	2018	0.09	1.18	1.13	128423	29955	2067
10	2019	0.05	1.12	0.86	121352	34580	2229
11	2020	0.04	1.64	1.28	115989	40629	2088
12	2021	0.01	1.69	1.36	91930	34529	1605
13	2022	-0.04	1.48	1.06	73347	34750	1612
14	2023	-0.04	1.27	1.16	73015	36964	1779
15	2024	0.02	0.80	0.95	19706	8979	617

HOL SS Mendelian sampling for 'dSB2' 4

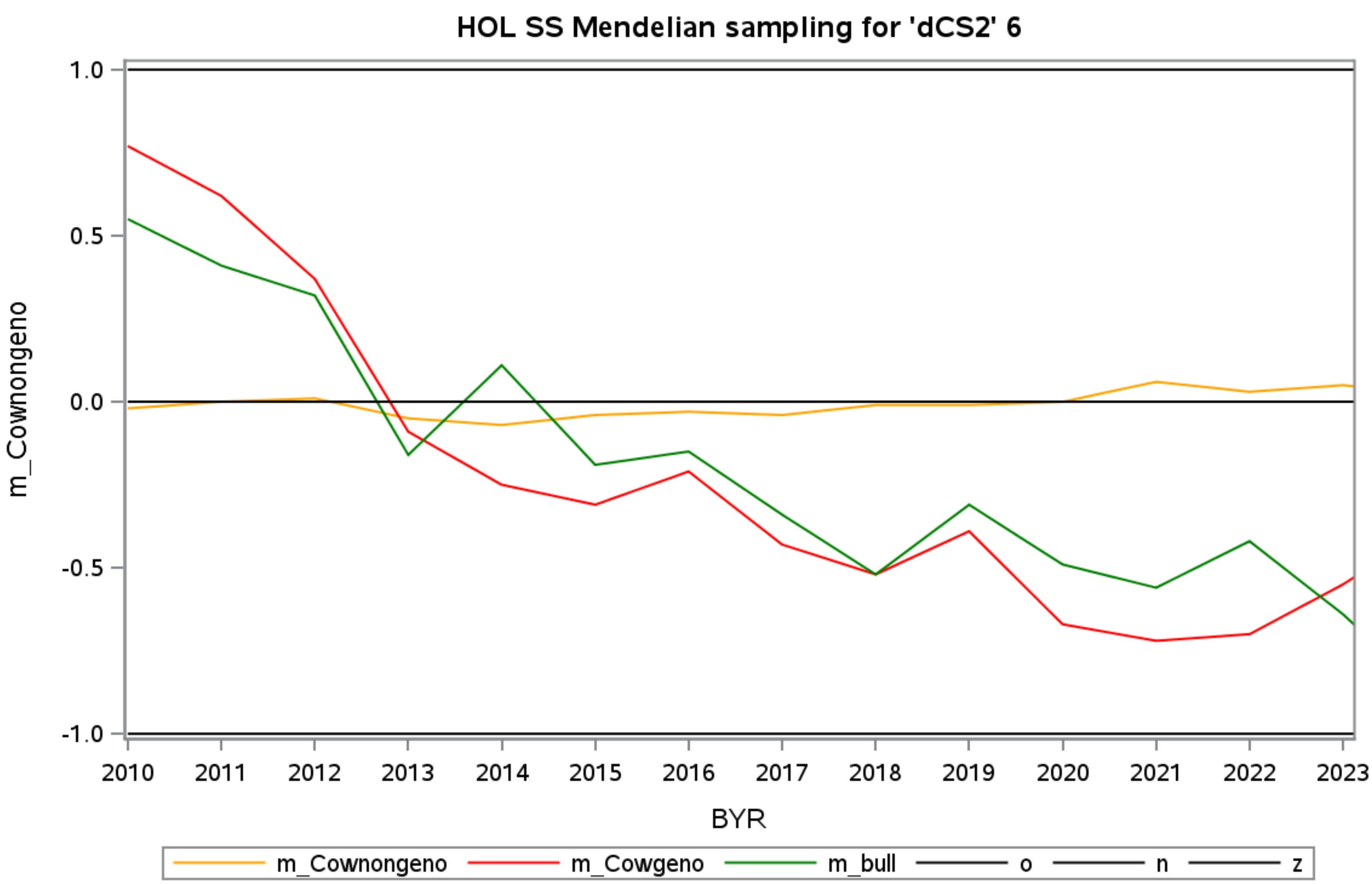


Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	0.02	-1.17	-1.06	185792	1079	563
2	2011	0.04	-0.84	-0.59	186302	2262	883
3	2012	0.06	-0.36	-0.41	183568	3596	1260
4	2013	0.06	0.15	0.16	179341	5780	1367
5	2014	0.05	0.34	-0.09	179249	6083	1494
6	2015	0.06	0.40	0.23	172005	8224	1632
7	2016	0.05	0.27	0.21	168838	14058	2032
8	2017	0.05	0.51	0.44	146822	21674	2169
9	2018	0.06	0.68	0.66	128423	29955	2067
10	2019	0.05	0.72	0.59	121352	34580	2229
11	2020	-0.01	0.88	0.68	115989	40629	2088
12	2021	-0.02	0.88	0.71	91930	34529	1605
13	2022	-0.01	0.80	0.50	73347	34750	1612
14	2023	-0.05	0.66	0.72	73015	36964	1779
15	2024	0.00	0.40	0.70	19706	8979	617



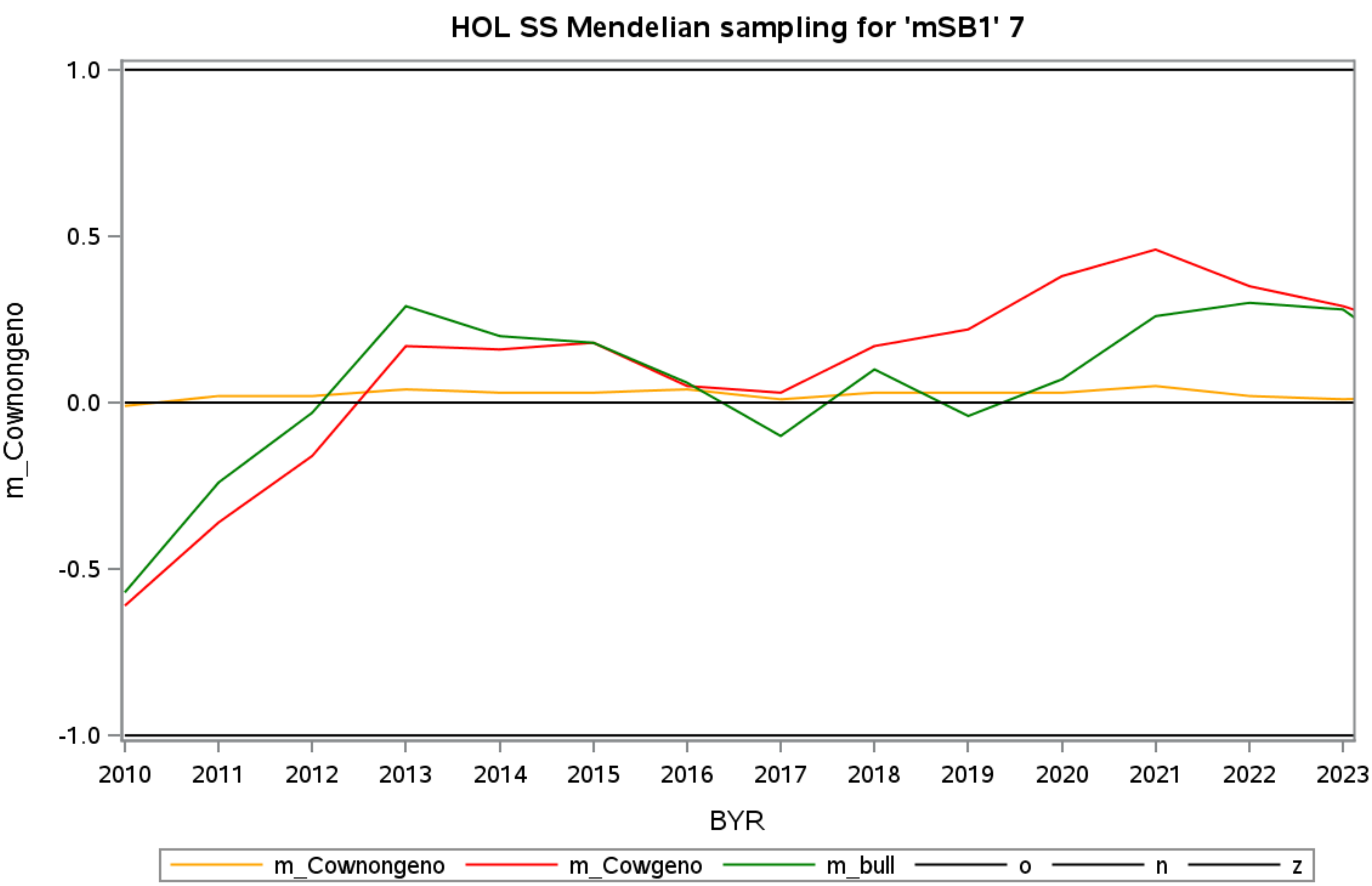
HOL SS Mendelian sampling for 'dCS2' 6

Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	-0.02	0.77	0.55	185792	1079	563
2	2011	0.00	0.62	0.41	186302	2262	883
3	2012	0.01	0.37	0.32	183568	3596	1260
4	2013	-0.05	-0.09	-0.16	179341	5780	1367
5	2014	-0.07	-0.25	0.11	179249	6083	1494
6	2015	-0.04	-0.31	-0.19	172005	8224	1632
7	2016	-0.03	-0.21	-0.15	168838	14058	2032
8	2017	-0.04	-0.43	-0.34	146822	21674	2169
9	2018	-0.01	-0.52	-0.52	128423	29955	2067
10	2019	-0.01	-0.39	-0.31	121352	34580	2229
11	2020	0.00	-0.67	-0.49	115989	40629	2088
12	2021	0.06	-0.72	-0.56	91930	34529	1605
13	2022	0.03	-0.70	-0.42	73347	34750	1612
14	2023	0.05	-0.55	-0.64	73015	36964	1779
15	2024	0.02	-0.37	-0.90	19706	8979	617



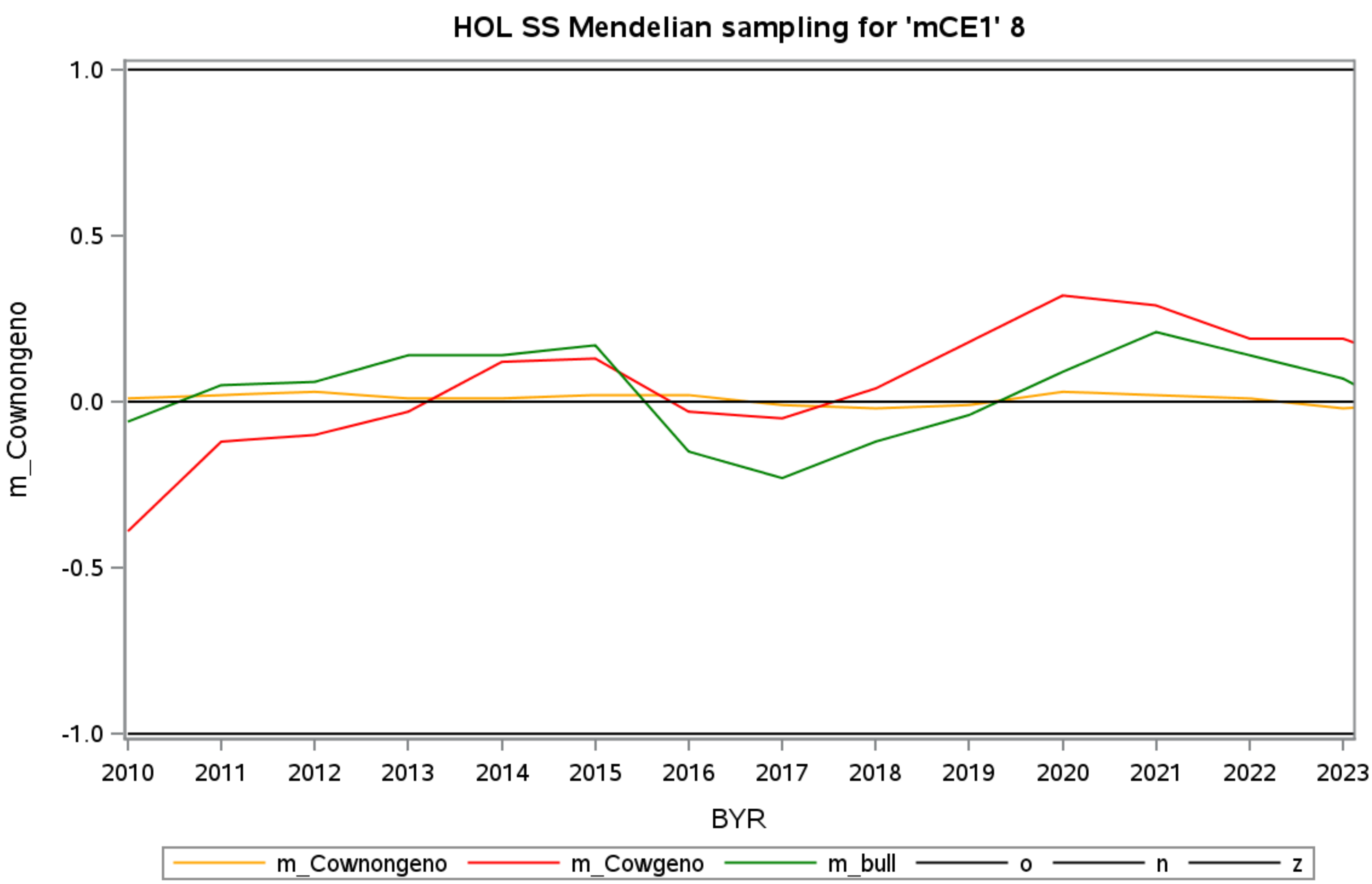
HOL SS Mendelian sampling for 'mSB1' 7

Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	-0.01	-0.61	-0.57	185792	1079	563
2	2011	0.02	-0.36	-0.24	186302	2262	883
3	2012	0.02	-0.16	-0.03	183568	3596	1260
4	2013	0.04	0.17	0.29	179341	5780	1367
5	2014	0.03	0.16	0.20	179249	6083	1494
6	2015	0.03	0.18	0.18	172005	8224	1632
7	2016	0.04	0.05	0.06	168838	14058	2032
8	2017	0.01	0.03	-0.10	146822	21674	2169
9	2018	0.03	0.17	0.10	128423	29955	2067
10	2019	0.03	0.22	-0.04	121352	34580	2229
11	2020	0.03	0.38	0.07	115989	40629	2088
12	2021	0.05	0.46	0.26	91930	34529	1605
13	2022	0.02	0.35	0.30	73347	34750	1612
14	2023	0.01	0.29	0.28	73015	36964	1779
15	2024	0.02	0.20	0.08	19706	8979	617



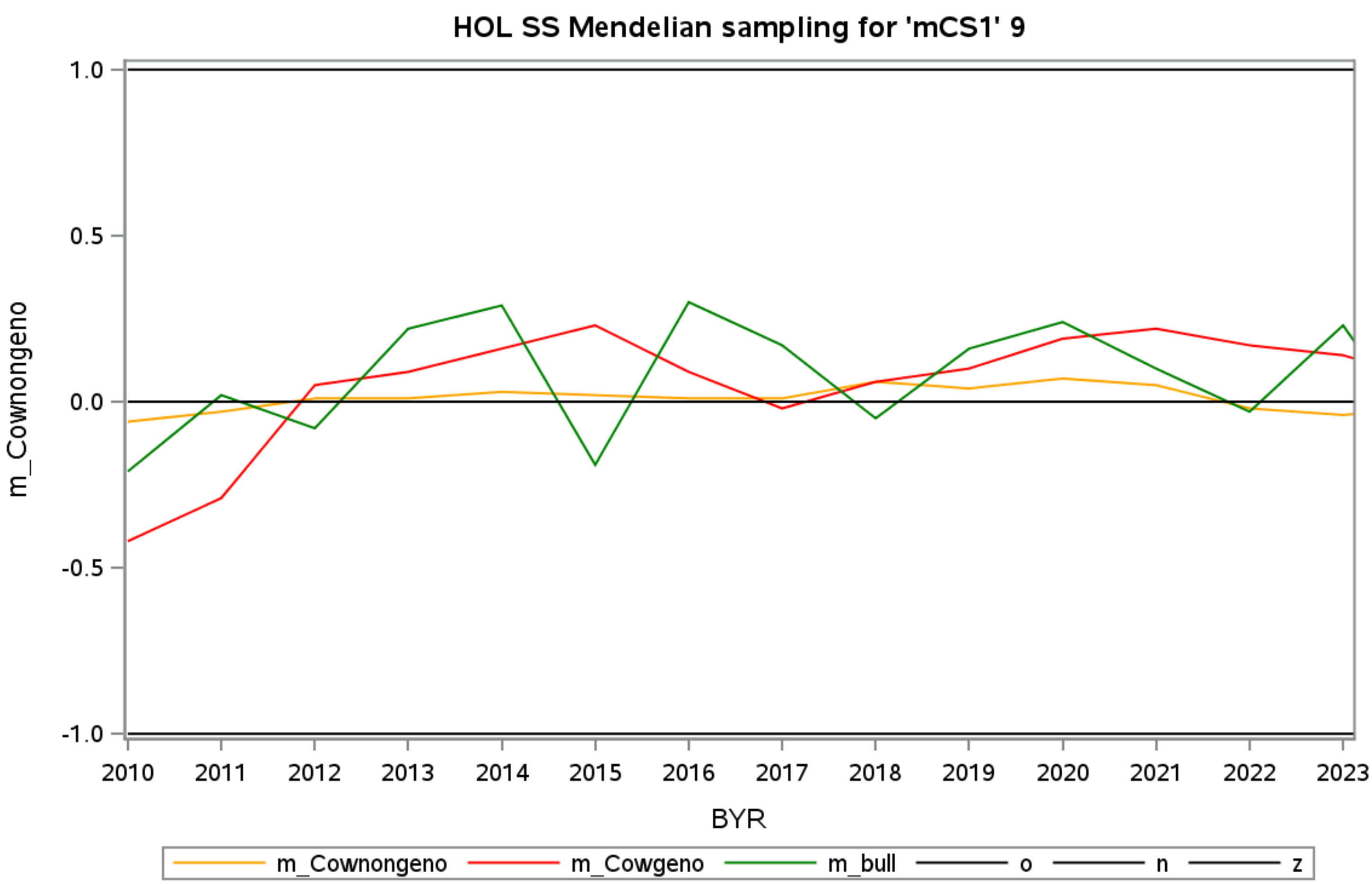
HOL SS Mendelian sampling for 'mCE1' 8

Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	0.01	-0.39	-0.06	185792	1079	563
2	2011	0.02	-0.12	0.05	186302	2262	883
3	2012	0.03	-0.10	0.06	183568	3596	1260
4	2013	0.01	-0.03	0.14	179341	5780	1367
5	2014	0.01	0.12	0.14	179249	6083	1494
6	2015	0.02	0.13	0.17	172005	8224	1632
7	2016	0.02	-0.03	-0.15	168838	14058	2032
8	2017	-0.01	-0.05	-0.23	146822	21674	2169
9	2018	-0.02	0.04	-0.12	128423	29955	2067
10	2019	-0.01	0.18	-0.04	121352	34580	2229
11	2020	0.03	0.32	0.09	115989	40629	2088
12	2021	0.02	0.29	0.21	91930	34529	1605
13	2022	0.01	0.19	0.14	73347	34750	1612
14	2023	-0.02	0.19	0.07	73015	36964	1779
15	2024	0.00	0.09	-0.08	19706	8979	617



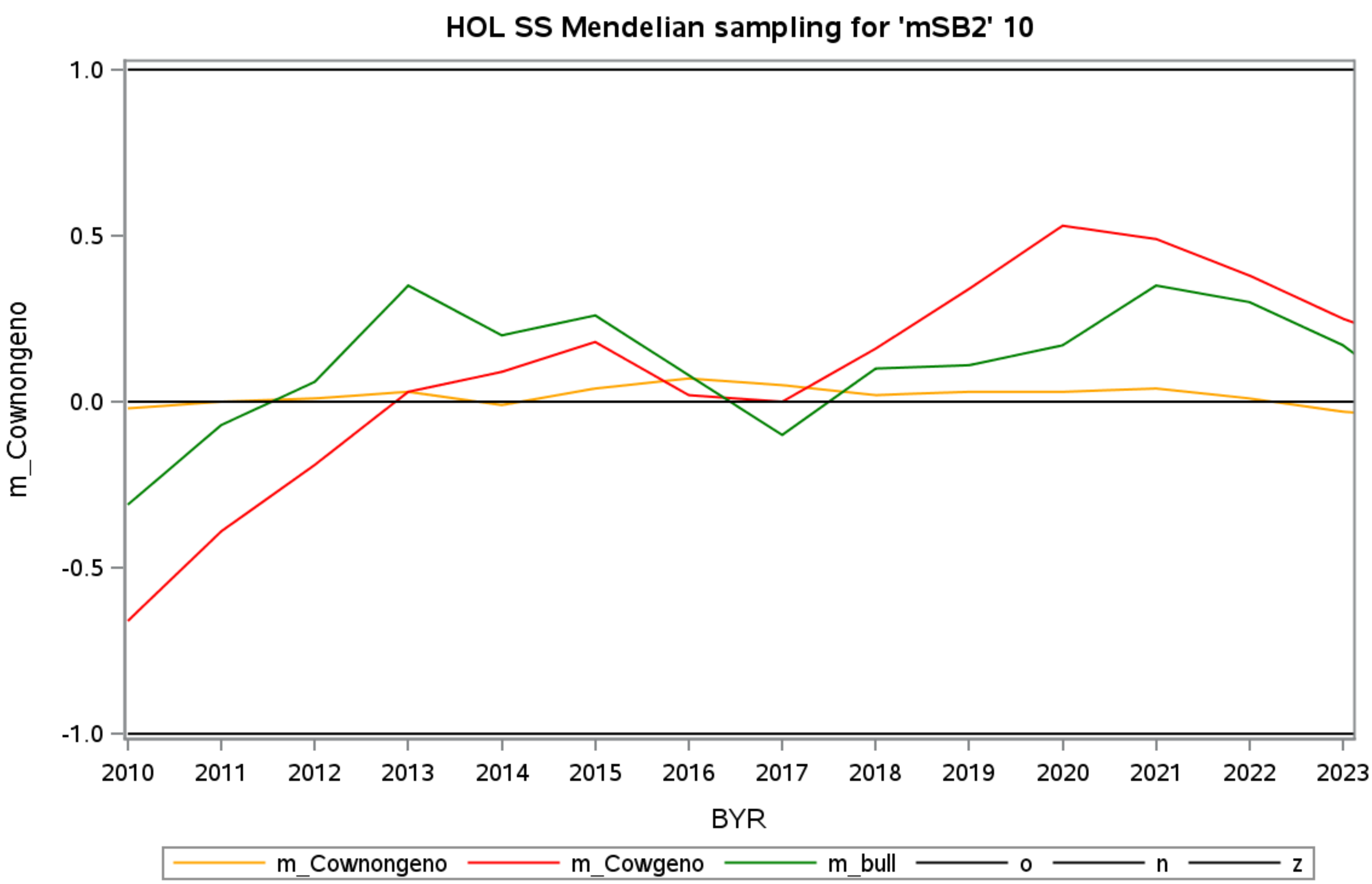
HOL SS Mendelian sampling for 'mCS1' 9

Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	-0.06	-0.42	-0.21	185792	1079	563
2	2011	-0.03	-0.29	0.02	186302	2262	883
3	2012	0.01	0.05	-0.08	183568	3596	1260
4	2013	0.01	0.09	0.22	179341	5780	1367
5	2014	0.03	0.16	0.29	179249	6083	1494
6	2015	0.02	0.23	-0.19	172005	8224	1632
7	2016	0.01	0.09	0.30	168838	14058	2032
8	2017	0.01	-0.02	0.17	146822	21674	2169
9	2018	0.06	0.06	-0.05	128423	29955	2067
10	2019	0.04	0.10	0.16	121352	34580	2229
11	2020	0.07	0.19	0.24	115989	40629	2088
12	2021	0.05	0.22	0.10	91930	34529	1605
13	2022	-0.02	0.17	-0.03	73347	34750	1612
14	2023	-0.04	0.14	0.23	73015	36964	1779
15	2024	-0.01	0.06	-0.17	19706	8979	617



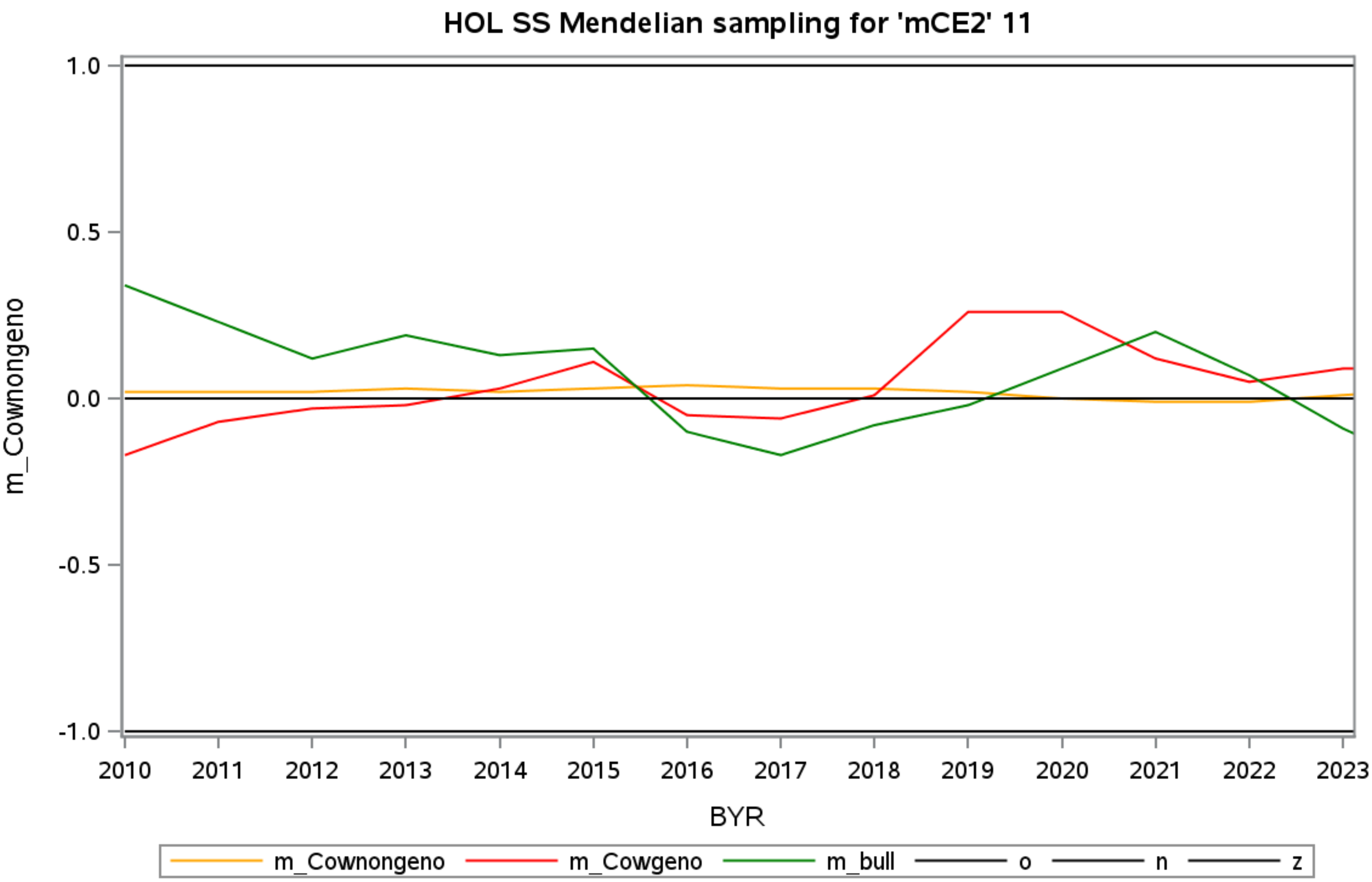
HOL SS Mendelian sampling for 'mSB2' 10

Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	-0.02	-0.66	-0.31	185792	1079	563
2	2011	0.00	-0.39	-0.07	186302	2262	883
3	2012	0.01	-0.19	0.06	183568	3596	1260
4	2013	0.03	0.03	0.35	179341	5780	1367
5	2014	-0.01	0.09	0.20	179249	6083	1494
6	2015	0.04	0.18	0.26	172005	8224	1632
7	2016	0.07	0.02	0.08	168838	14058	2032
8	2017	0.05	0.00	-0.10	146822	21674	2169
9	2018	0.02	0.16	0.10	128423	29955	2067
10	2019	0.03	0.34	0.11	121352	34580	2229
11	2020	0.03	0.53	0.17	115989	40629	2088
12	2021	0.04	0.49	0.35	91930	34529	1605
13	2022	0.01	0.38	0.30	73347	34750	1612
14	2023	-0.03	0.25	0.17	73015	36964	1779
15	2024	-0.05	0.15	-0.04	19706	8979	617

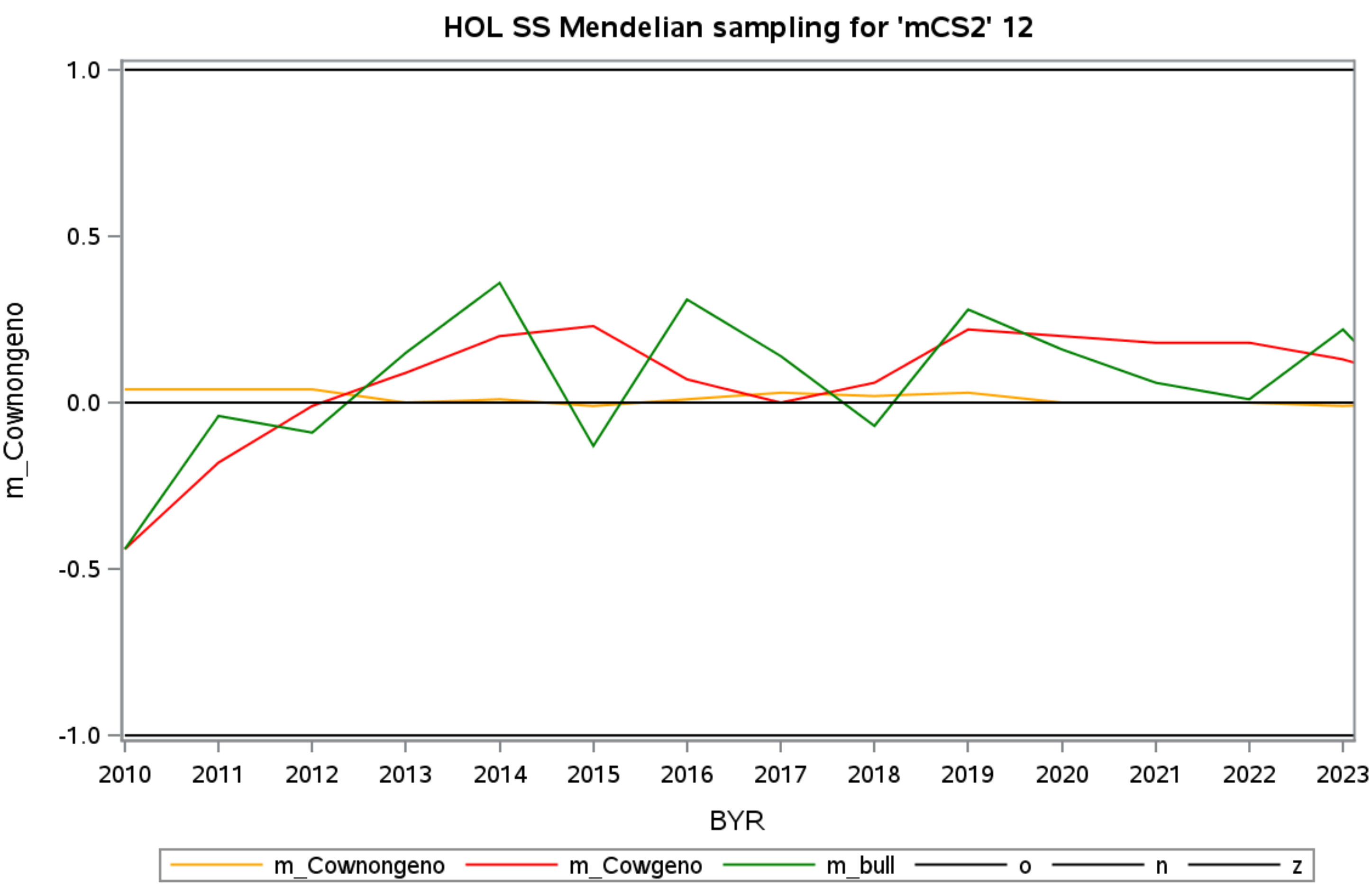


HOL SS Mendelian sampling for 'mCE2' 11

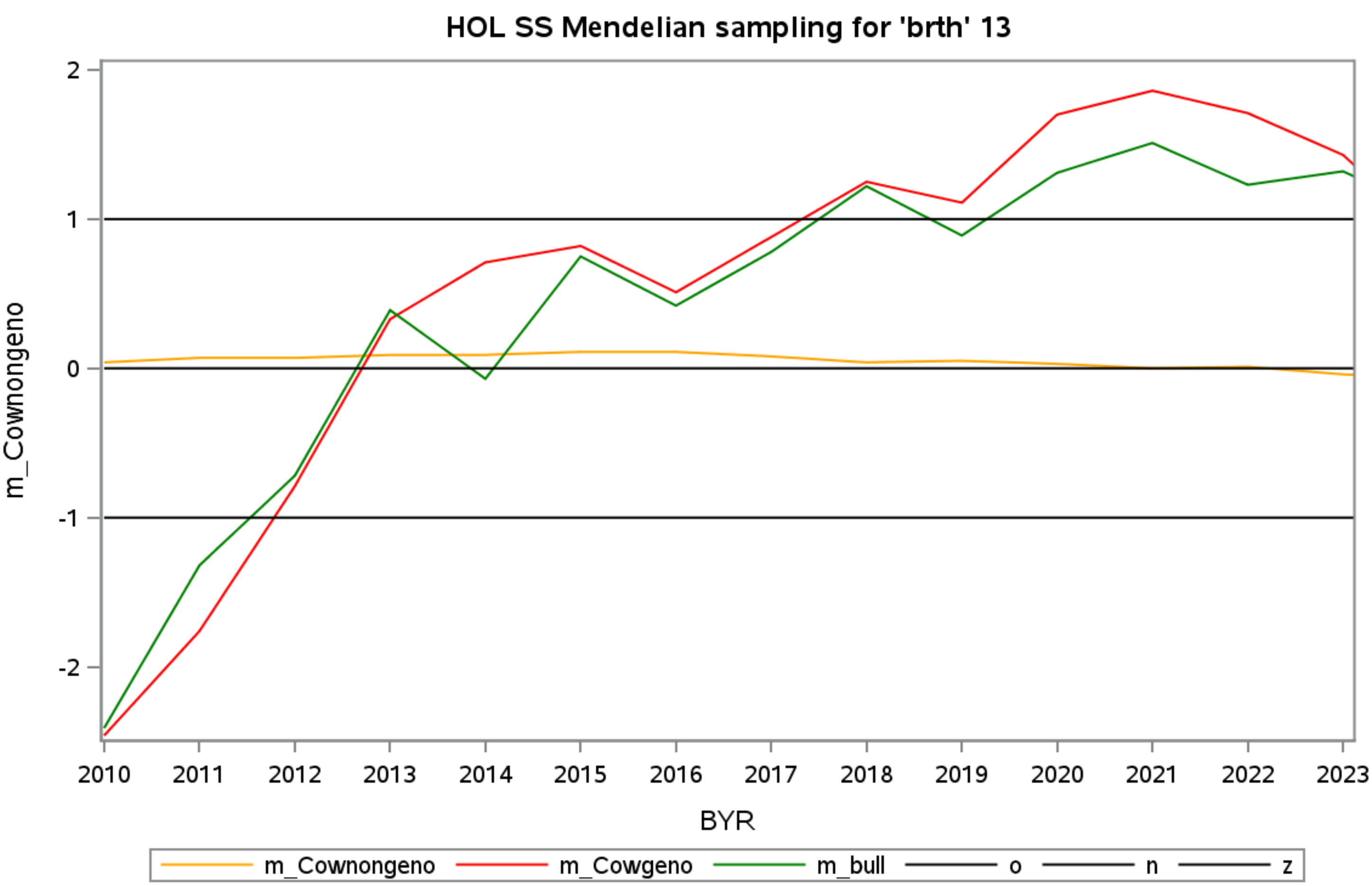
Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	0.02	-0.17	0.34	185792	1079	563
2	2011	0.02	-0.07	0.23	186302	2262	883
3	2012	0.02	-0.03	0.12	183568	3596	1260
4	2013	0.03	-0.02	0.19	179341	5780	1367
5	2014	0.02	0.03	0.13	179249	6083	1494
6	2015	0.03	0.11	0.15	172005	8224	1632
7	2016	0.04	-0.05	-0.10	168838	14058	2032
8	2017	0.03	-0.06	-0.17	146822	21674	2169
9	2018	0.03	0.01	-0.08	128423	29955	2067
10	2019	0.02	0.26	-0.02	121352	34580	2229
11	2020	0.00	0.26	0.09	115989	40629	2088
12	2021	-0.01	0.12	0.20	91930	34529	1605
13	2022	-0.01	0.05	0.07	73347	34750	1612
14	2023	0.01	0.09	-0.09	73015	36964	1779
15	2024	0.03	0.09	-0.22	19706	8979	617



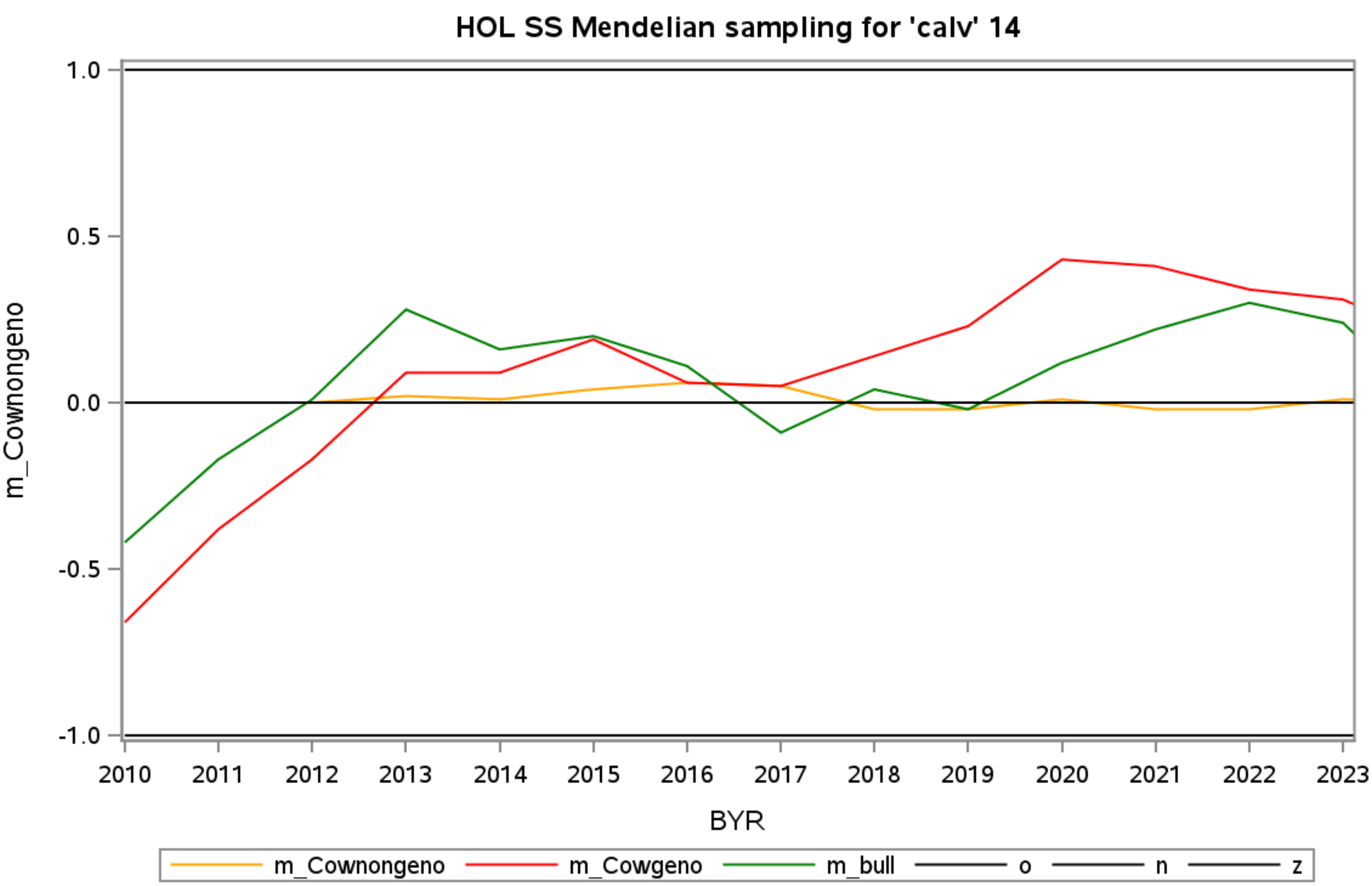
Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	0.04	-0.44	-0.44	185792	1079	563
2	2011	0.04	-0.18	-0.04	186302	2262	883
3	2012	0.04	-0.01	-0.09	183568	3596	1260
4	2013	0.00	0.09	0.15	179341	5780	1367
5	2014	0.01	0.20	0.36	179249	6083	1494
6	2015	-0.01	0.23	-0.13	172005	8224	1632
7	2016	0.01	0.07	0.31	168838	14058	2032
8	2017	0.03	0.00	0.14	146822	21674	2169
9	2018	0.02	0.06	-0.07	128423	29955	2067
10	2019	0.03	0.22	0.28	121352	34580	2229
11	2020	0.00	0.20	0.16	115989	40629	2088
12	2021	0.00	0.18	0.06	91930	34529	1605
13	2022	0.00	0.18	0.01	73347	34750	1612
14	2023	-0.01	0.13	0.22	73015	36964	1779
15	2024	0.00	0.05	-0.07	19706	8979	617



Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	0.04	-2.46	-2.41	185792	1079	563
2	2011	0.07	-1.76	-1.32	186302	2262	883
3	2012	0.07	-0.79	-0.72	183568	3596	1260
4	2013	0.09	0.33	0.39	179341	5780	1367
5	2014	0.09	0.71	-0.07	179249	6083	1494
6	2015	0.11	0.82	0.75	172005	8224	1632
7	2016	0.11	0.51	0.42	168838	14058	2032
8	2017	0.08	0.88	0.78	146822	21674	2169
9	2018	0.04	1.25	1.22	128423	29955	2067
10	2019	0.05	1.11	0.89	121352	34580	2229
11	2020	0.03	1.70	1.31	115989	40629	2088
12	2021	0.00	1.86	1.51	91930	34529	1605
13	2022	0.01	1.71	1.23	73347	34750	1612
14	2023	-0.04	1.43	1.32	73015	36964	1779
15	2024	-0.07	0.85	1.03	19706	8979	617

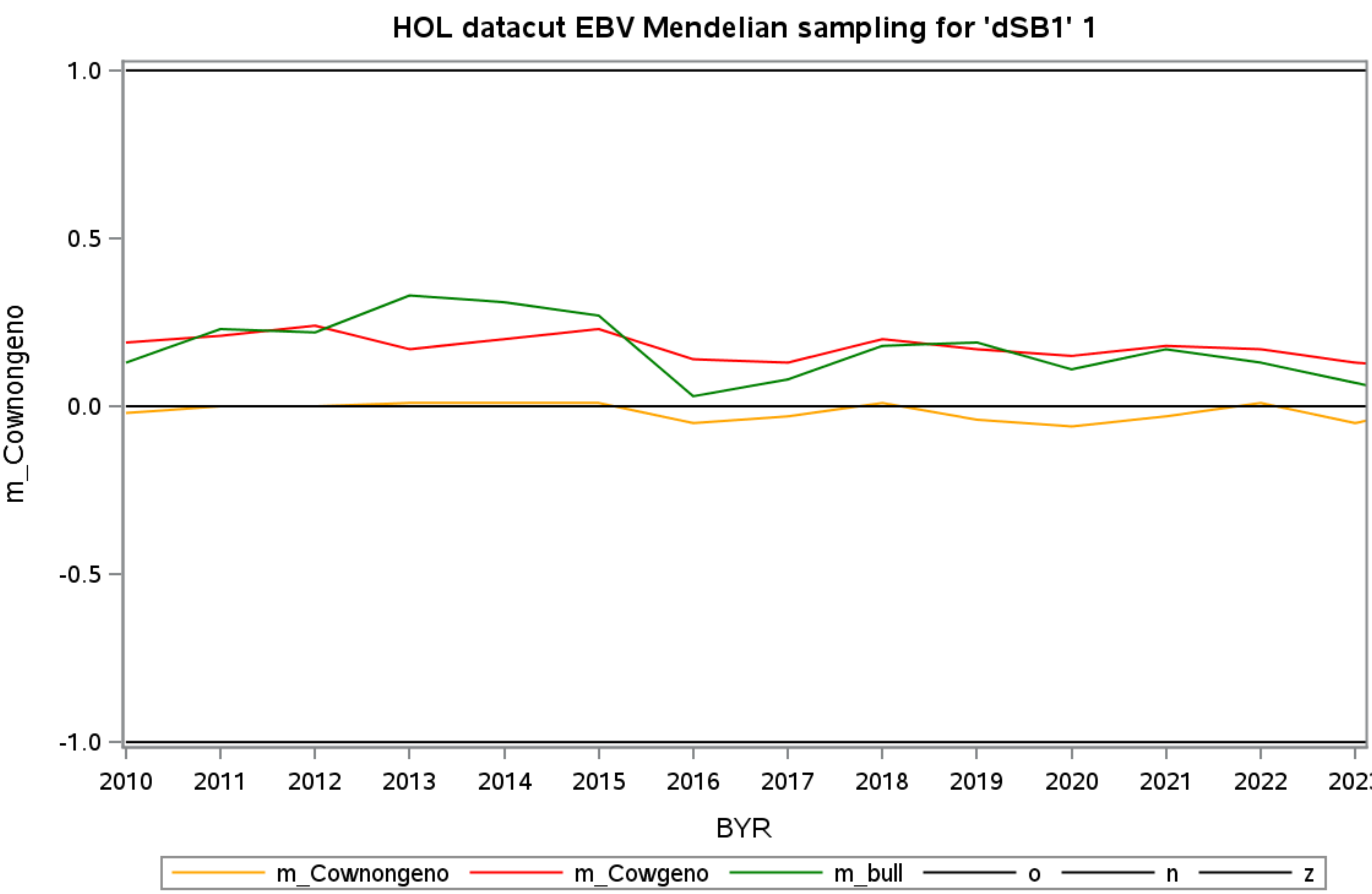


Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	0.00	-0.66	-0.42	185792	1079	563
2	2011	0.00	-0.38	-0.17	186302	2262	883
3	2012	0.00	-0.17	0.01	183568	3596	1260
4	2013	0.02	0.09	0.28	179341	5780	1367
5	2014	0.01	0.09	0.16	179249	6083	1494
6	2015	0.04	0.19	0.20	172005	8224	1632
7	2016	0.06	0.06	0.11	168838	14058	2032
8	2017	0.05	0.05	-0.09	146822	21674	2169
9	2018	-0.02	0.14	0.04	128423	29955	2067
10	2019	-0.02	0.23	-0.02	121352	34580	2229
11	2020	0.01	0.43	0.12	115989	40629	2088
12	2021	-0.02	0.41	0.22	91930	34529	1605
13	2022	-0.02	0.34	0.30	73347	34750	1612
14	2023	0.01	0.31	0.24	73015	36964	1779
15	2024	0.00	0.19	-0.03	19706	8979	617



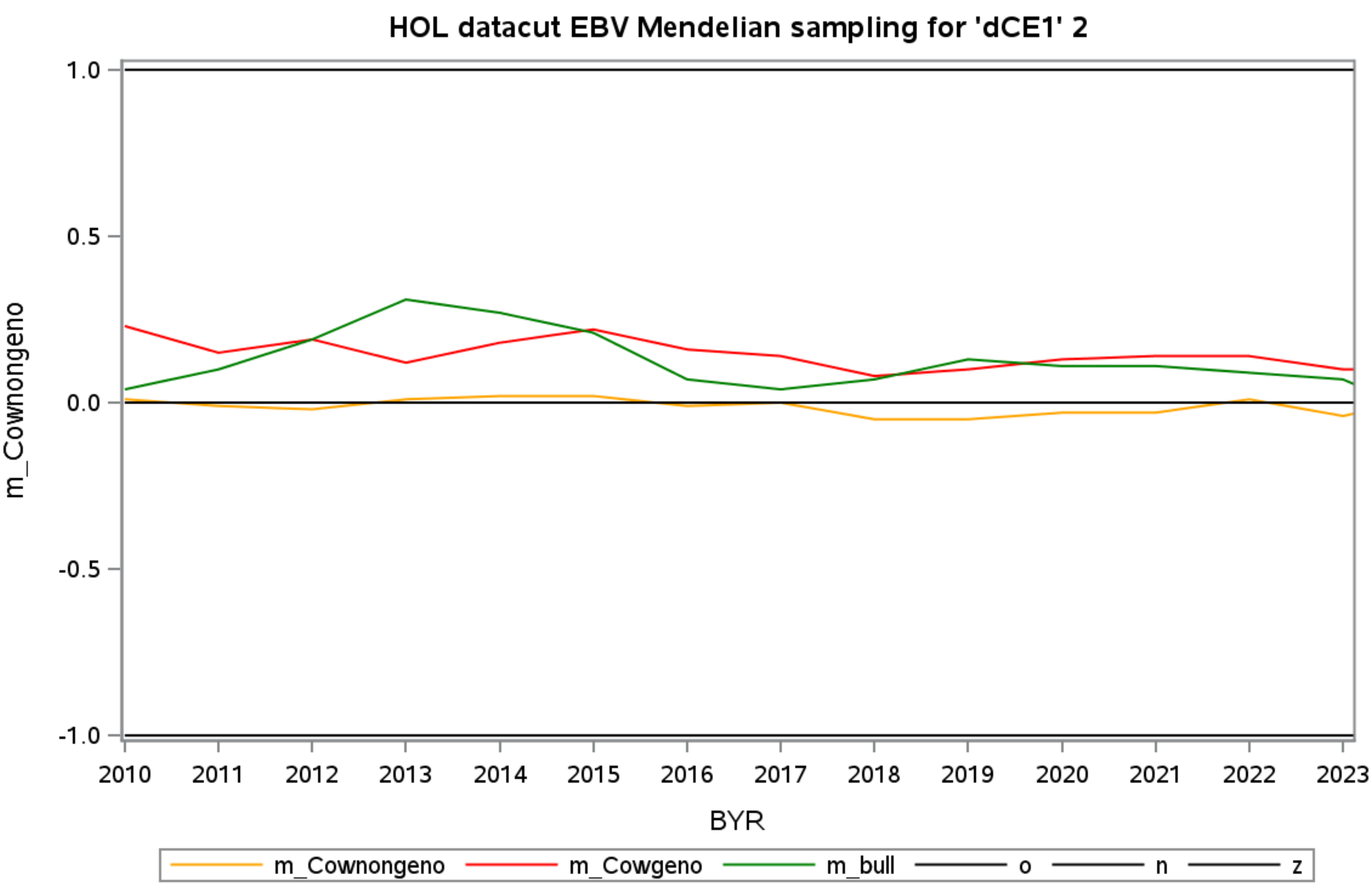
HOL datacut EBV Mendelian sampling for 'dSB1' 1

Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	-0.02	0.19	0.13	185792	1079	563
2	2011	0.00	0.21	0.23	186302	2262	883
3	2012	0.00	0.24	0.22	183568	3596	1260
4	2013	0.01	0.17	0.33	179341	5780	1367
5	2014	0.01	0.20	0.31	179249	6083	1494
6	2015	0.01	0.23	0.27	172005	8224	1632
7	2016	-0.05	0.14	0.03	168838	14058	2032
8	2017	-0.03	0.13	0.08	146822	21674	2169
9	2018	0.01	0.20	0.18	128423	29955	2067
10	2019	-0.04	0.17	0.19	121352	34580	2229
11	2020	-0.06	0.15	0.11	115989	40629	2088
12	2021	-0.03	0.18	0.17	91930	34529	1605
13	2022	0.01	0.17	0.13	73347	34750	1612
14	2023	-0.05	0.13	0.07	73015	36964	1779
15	2024	0.01	0.11	0.01	19706	8979	617



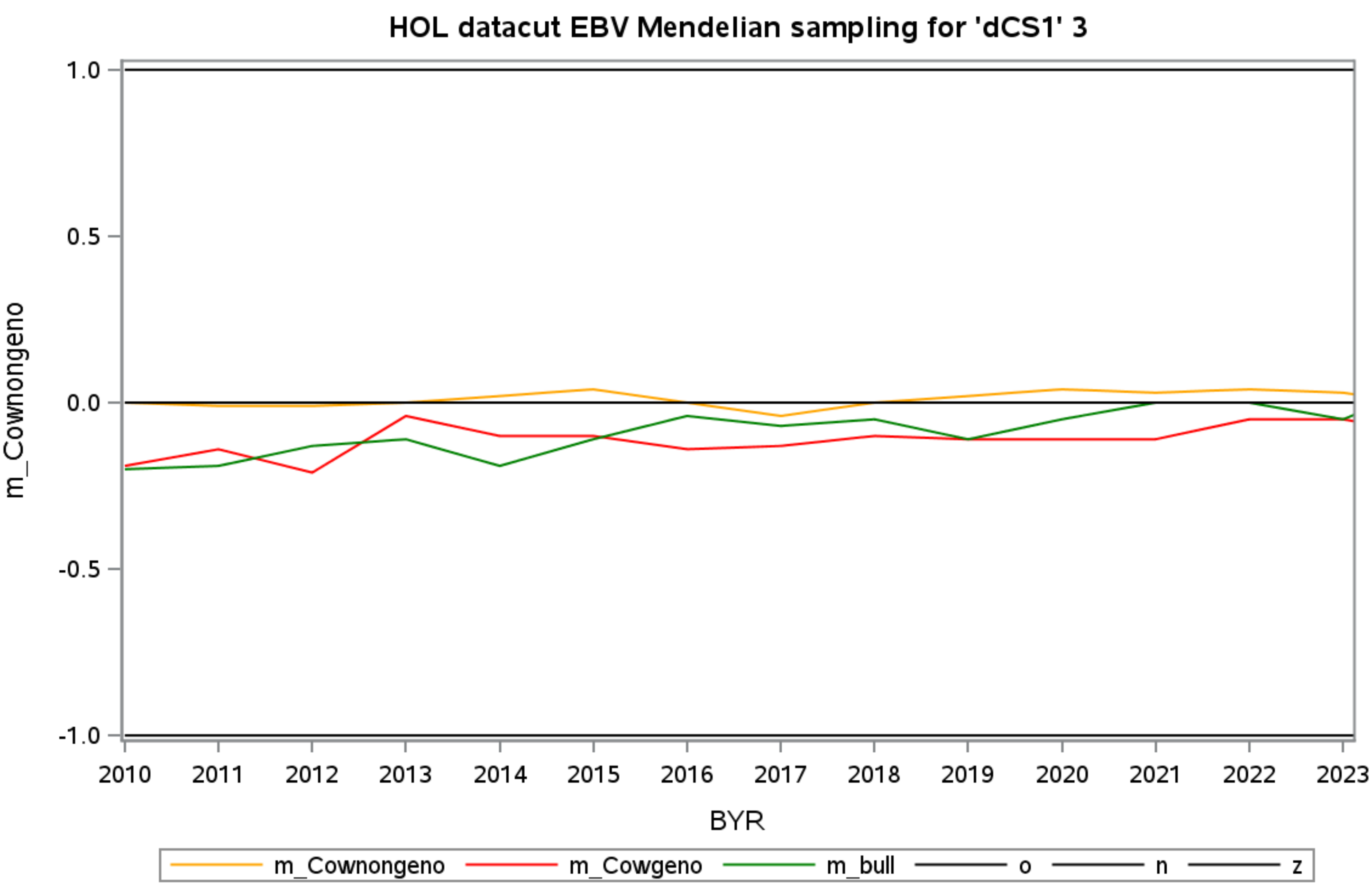
HOL datacut EBV Mendelian sampling for 'dCE1' 2

Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	0.01	0.23	0.04	185792	1079	563
2	2011	-0.01	0.15	0.10	186302	2262	883
3	2012	-0.02	0.19	0.19	183568	3596	1260
4	2013	0.01	0.12	0.31	179341	5780	1367
5	2014	0.02	0.18	0.27	179249	6083	1494
6	2015	0.02	0.22	0.21	172005	8224	1632
7	2016	-0.01	0.16	0.07	168838	14058	2032
8	2017	0.00	0.14	0.04	146822	21674	2169
9	2018	-0.05	0.08	0.07	128423	29955	2067
10	2019	-0.05	0.10	0.13	121352	34580	2229
11	2020	-0.03	0.13	0.11	115989	40629	2088
12	2021	-0.03	0.14	0.11	91930	34529	1605
13	2022	0.01	0.14	0.09	73347	34750	1612
14	2023	-0.04	0.10	0.07	73015	36964	1779
15	2024	0.02	0.10	-0.05	19706	8979	617

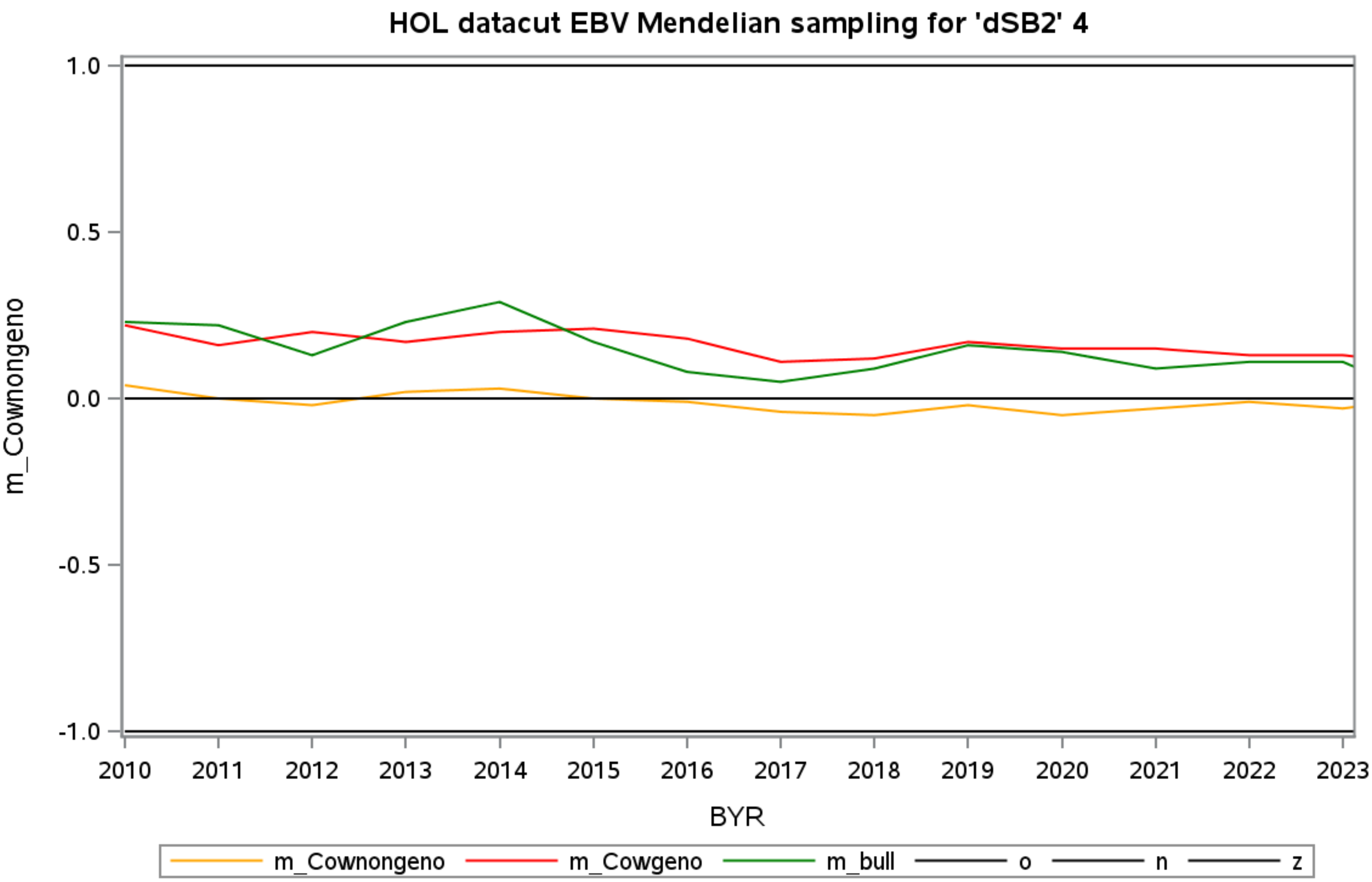


HOL datacut EBV Mendelian sampling for 'dCS1' 3

Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	0.00	-0.19	-0.20	185792	1079	563
2	2011	-0.01	-0.14	-0.19	186302	2262	883
3	2012	-0.01	-0.21	-0.13	183568	3596	1260
4	2013	0.00	-0.04	-0.11	179341	5780	1367
5	2014	0.02	-0.10	-0.19	179249	6083	1494
6	2015	0.04	-0.10	-0.11	172005	8224	1632
7	2016	0.00	-0.14	-0.04	168838	14058	2032
8	2017	-0.04	-0.13	-0.07	146822	21674	2169
9	2018	0.00	-0.10	-0.05	128423	29955	2067
10	2019	0.02	-0.11	-0.11	121352	34580	2229
11	2020	0.04	-0.11	-0.05	115989	40629	2088
12	2021	0.03	-0.11	0.00	91930	34529	1605
13	2022	0.04	-0.05	0.00	73347	34750	1612
14	2023	0.03	-0.05	-0.05	73015	36964	1779
15	2024	-0.01	-0.10	0.06	19706	8979	617

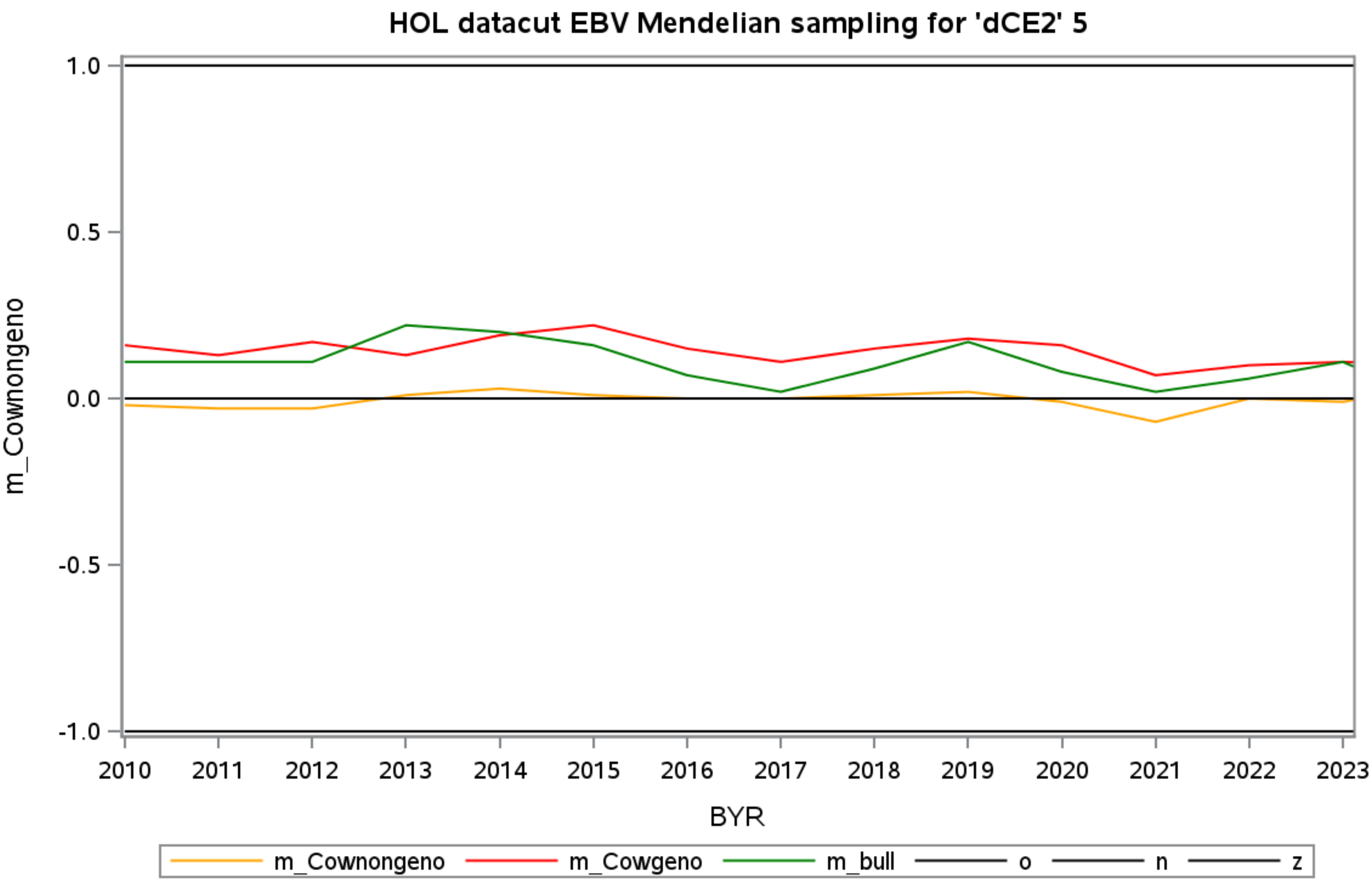


Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	0.04	0.22	0.23	185792	1079	563
2	2011	0.00	0.16	0.22	186302	2262	883
3	2012	-0.02	0.20	0.13	183568	3596	1260
4	2013	0.02	0.17	0.23	179341	5780	1367
5	2014	0.03	0.20	0.29	179249	6083	1494
6	2015	0.00	0.21	0.17	172005	8224	1632
7	2016	-0.01	0.18	0.08	168838	14058	2032
8	2017	-0.04	0.11	0.05	146822	21674	2169
9	2018	-0.05	0.12	0.09	128423	29955	2067
10	2019	-0.02	0.17	0.16	121352	34580	2229
11	2020	-0.05	0.15	0.14	115989	40629	2088
12	2021	-0.03	0.15	0.09	91930	34529	1605
13	2022	-0.01	0.13	0.11	73347	34750	1612
14	2023	-0.03	0.13	0.11	73015	36964	1779
15	2024	0.01	0.10	-0.01	19706	8979	617



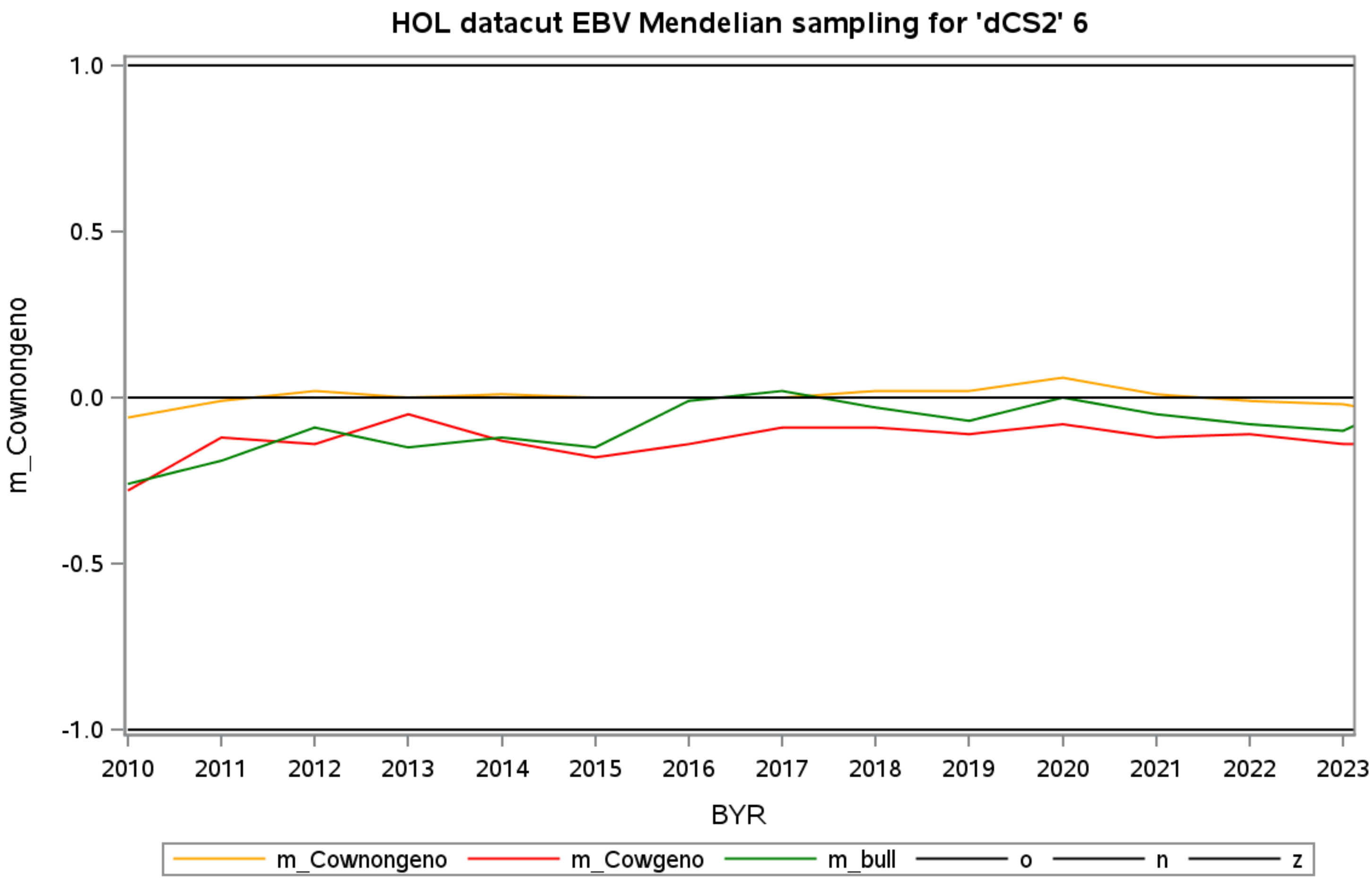
HOL datacut EBV Mendelian sampling for 'dCE2' 5

Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	-0.02	0.16	0.11	185792	1079	563
2	2011	-0.03	0.13	0.11	186302	2262	883
3	2012	-0.03	0.17	0.11	183568	3596	1260
4	2013	0.01	0.13	0.22	179341	5780	1367
5	2014	0.03	0.19	0.20	179249	6083	1494
6	2015	0.01	0.22	0.16	172005	8224	1632
7	2016	0.00	0.15	0.07	168838	14058	2032
8	2017	0.00	0.11	0.02	146822	21674	2169
9	2018	0.01	0.15	0.09	128423	29955	2067
10	2019	0.02	0.18	0.17	121352	34580	2229
11	2020	-0.01	0.16	0.08	115989	40629	2088
12	2021	-0.07	0.07	0.02	91930	34529	1605
13	2022	0.00	0.10	0.06	73347	34750	1612
14	2023	-0.01	0.11	0.11	73015	36964	1779
15	2024	0.04	0.10	-0.01	19706	8979	617



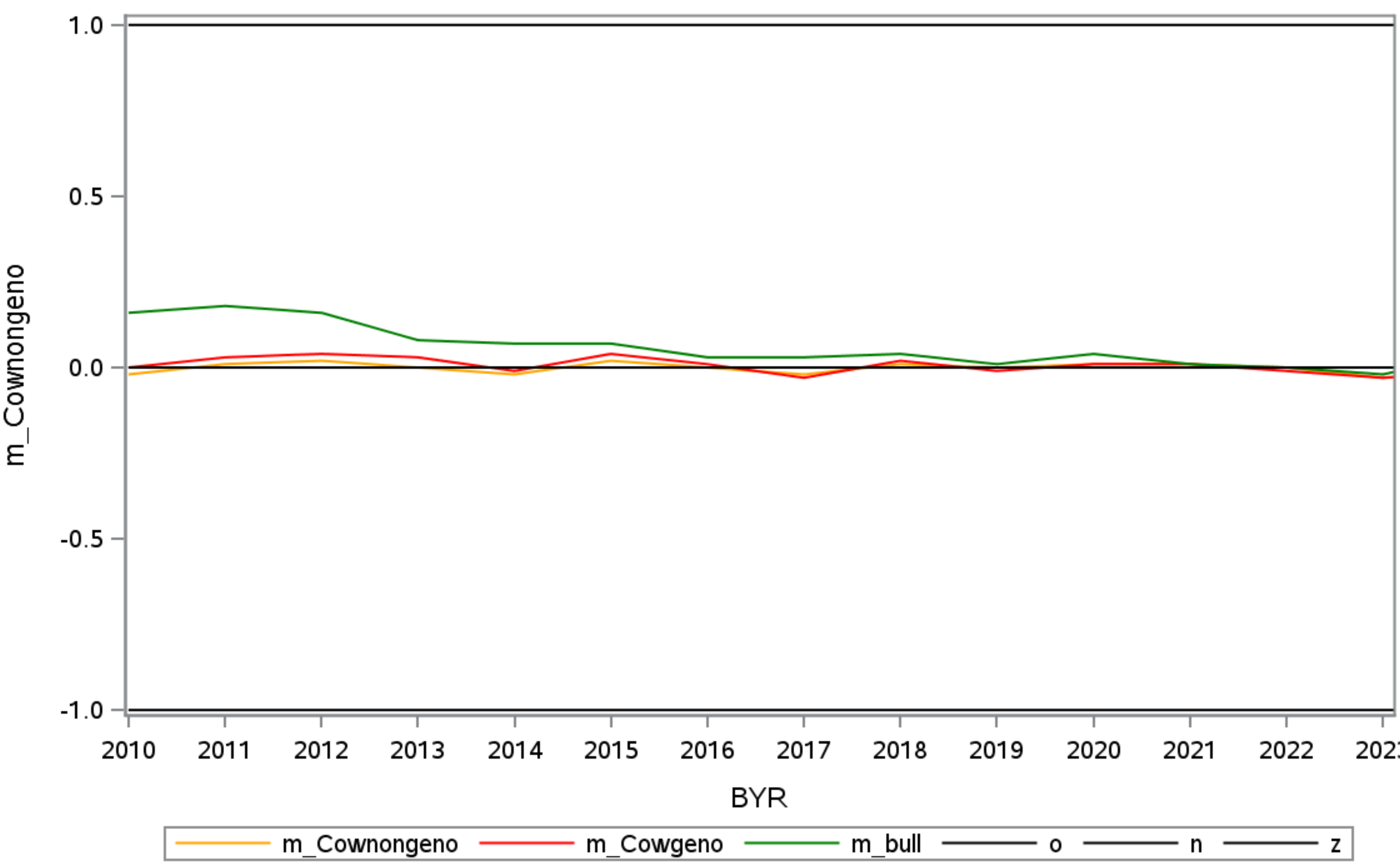
HOL datacut EBV Mendelian sampling for 'dCS2' 6

Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	-0.06	-0.28	-0.26	185792	1079	563
2	2011	-0.01	-0.12	-0.19	186302	2262	883
3	2012	0.02	-0.14	-0.09	183568	3596	1260
4	2013	0.00	-0.05	-0.15	179341	5780	1367
5	2014	0.01	-0.13	-0.12	179249	6083	1494
6	2015	0.00	-0.18	-0.15	172005	8224	1632
7	2016	0.00	-0.14	-0.01	168838	14058	2032
8	2017	0.00	-0.09	0.02	146822	21674	2169
9	2018	0.02	-0.09	-0.03	128423	29955	2067
10	2019	0.02	-0.11	-0.07	121352	34580	2229
11	2020	0.06	-0.08	0.00	115989	40629	2088
12	2021	0.01	-0.12	-0.05	91930	34529	1605
13	2022	-0.01	-0.11	-0.08	73347	34750	1612
14	2023	-0.02	-0.14	-0.10	73015	36964	1779
15	2024	-0.07	-0.14	0.03	19706	8979	617



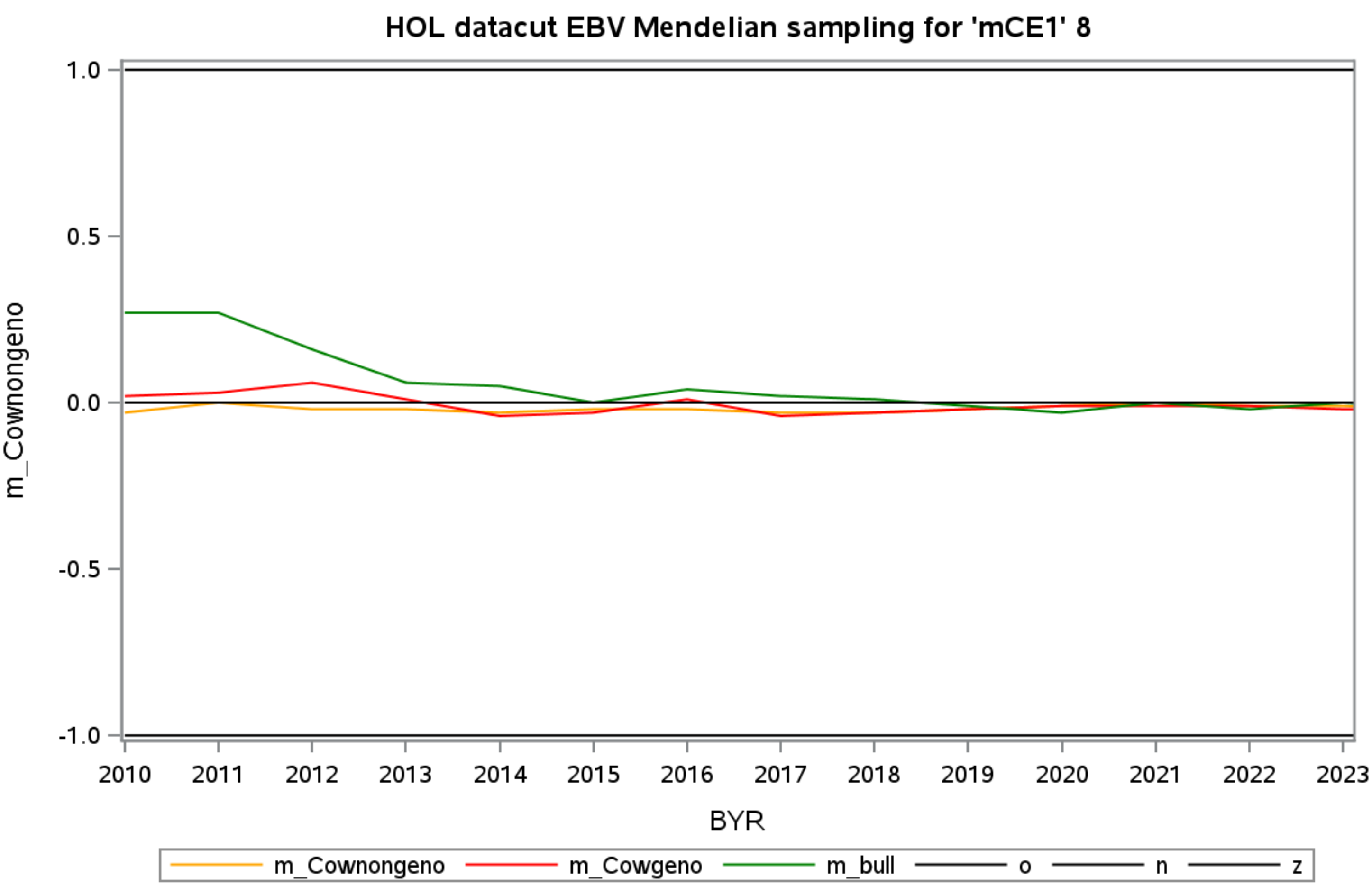
Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	-0.02	0.00	0.16	185792	1079	563
2	2011	0.01	0.03	0.18	186302	2262	883
3	2012	0.02	0.04	0.16	183568	3596	1260
4	2013	0.00	0.03	0.08	179341	5780	1367
5	2014	-0.02	-0.01	0.07	179249	6083	1494
6	2015	0.02	0.04	0.07	172005	8224	1632
7	2016	0.00	0.01	0.03	168838	14058	2032
8	2017	-0.02	-0.03	0.03	146822	21674	2169
9	2018	0.01	0.02	0.04	128423	29955	2067
10	2019	0.00	-0.01	0.01	121352	34580	2229
11	2020	0.01	0.01	0.04	115989	40629	2088
12	2021	0.01	0.01	0.01	91930	34529	1605
13	2022	0.00	-0.01	0.00	73347	34750	1612
14	2023	-0.03	-0.03	-0.02	73015	36964	1779
15	2024	-0.01	-0.01	0.04	19706	8979	617

HOL datacut EBV Mendelian sampling for 'mSB1' 7

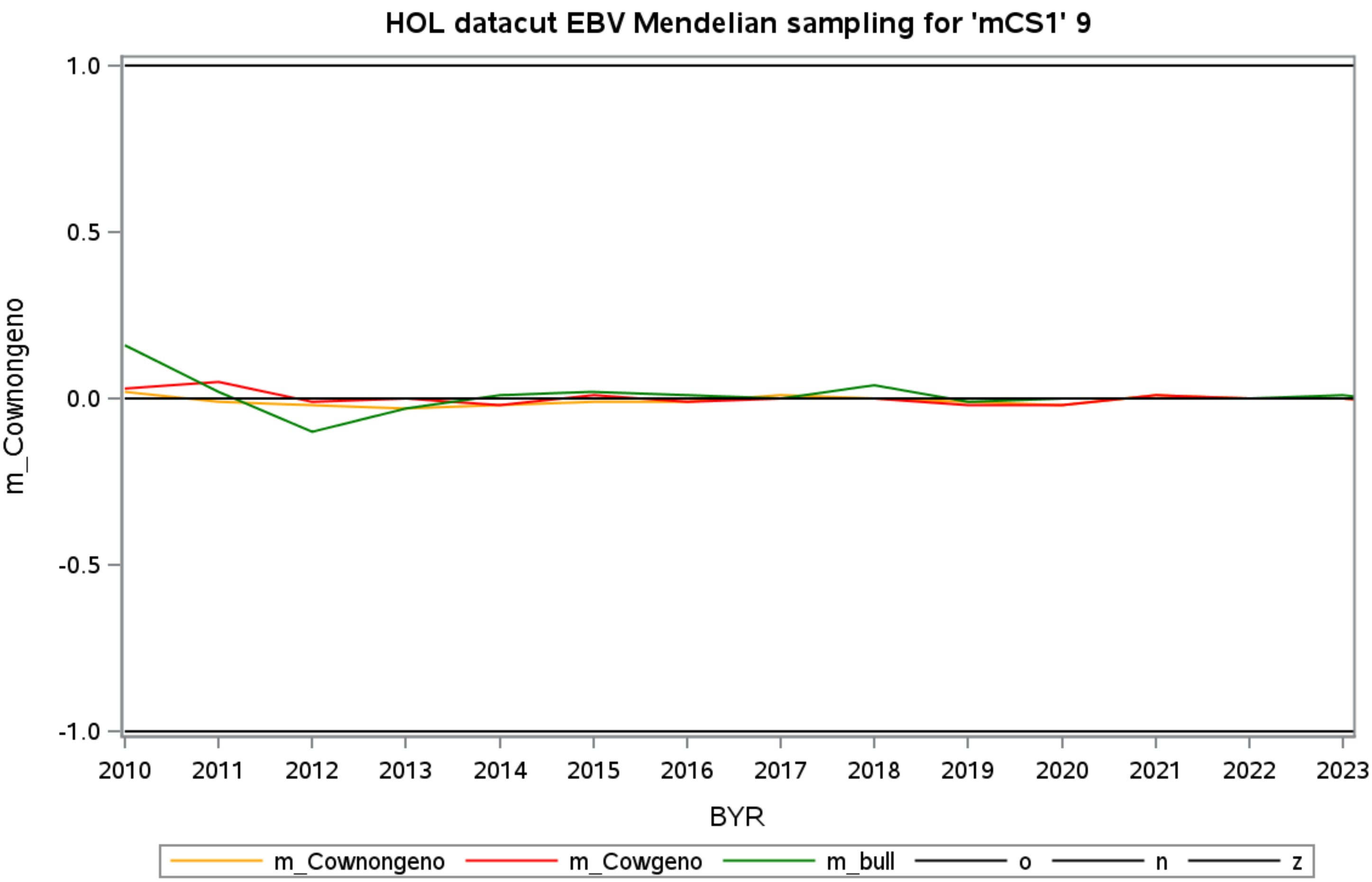


HOL datacut EBV Mendelian sampling for 'mCE1' 8

Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	-0.03	0.02	0.27	185792	1079	563
2	2011	0.00	0.03	0.27	186302	2262	883
3	2012	-0.02	0.06	0.16	183568	3596	1260
4	2013	-0.02	0.01	0.06	179341	5780	1367
5	2014	-0.03	-0.04	0.05	179249	6083	1494
6	2015	-0.02	-0.03	0.00	172005	8224	1632
7	2016	-0.02	0.01	0.04	168838	14058	2032
8	2017	-0.03	-0.04	0.02	146822	21674	2169
9	2018	-0.03	-0.03	0.01	128423	29955	2067
10	2019	-0.02	-0.02	-0.01	121352	34580	2229
11	2020	-0.01	-0.01	-0.03	115989	40629	2088
12	2021	0.00	-0.01	0.00	91930	34529	1605
13	2022	-0.01	-0.01	-0.02	73347	34750	1612
14	2023	-0.01	-0.02	0.00	73015	36964	1779
15	2024	-0.02	-0.02	-0.02	19706	8979	617

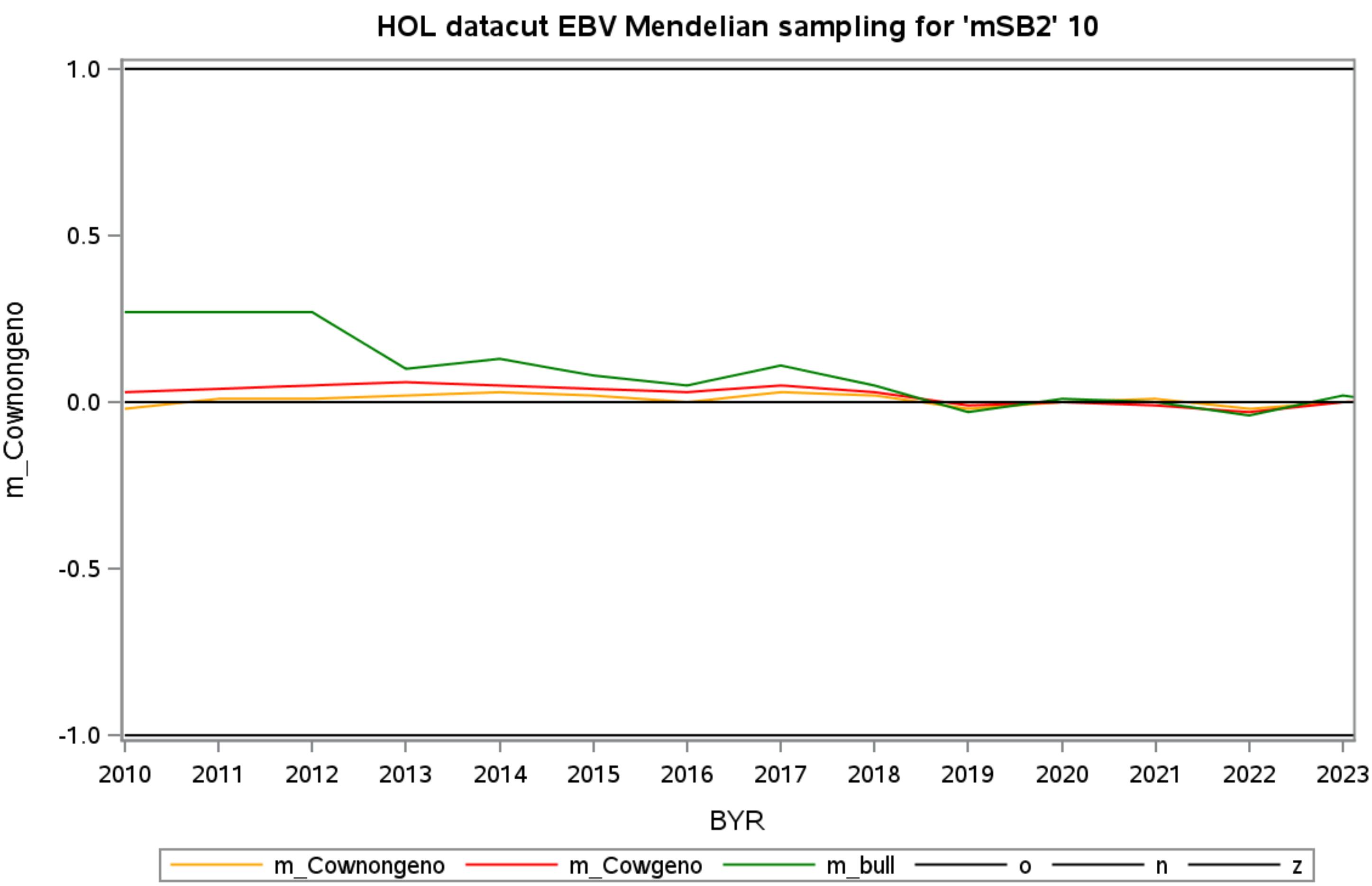


Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	0.02	0.03	0.16	185792	1079	563
2	2011	-0.01	0.05	0.02	186302	2262	883
3	2012	-0.02	-0.01	-0.10	183568	3596	1260
4	2013	-0.03	0.00	-0.03	179341	5780	1367
5	2014	-0.02	-0.02	0.01	179249	6083	1494
6	2015	-0.01	0.01	0.02	172005	8224	1632
7	2016	-0.01	-0.01	0.01	168838	14058	2032
8	2017	0.01	0.00	0.00	146822	21674	2169
9	2018	0.00	0.00	0.04	128423	29955	2067
10	2019	-0.01	-0.02	-0.01	121352	34580	2229
11	2020	-0.02	-0.02	0.00	115989	40629	2088
12	2021	0.01	0.01	0.00	91930	34529	1605
13	2022	0.00	0.00	0.00	73347	34750	1612
14	2023	0.00	0.00	0.01	73015	36964	1779
15	2024	-0.02	-0.02	-0.02	19706	8979	617



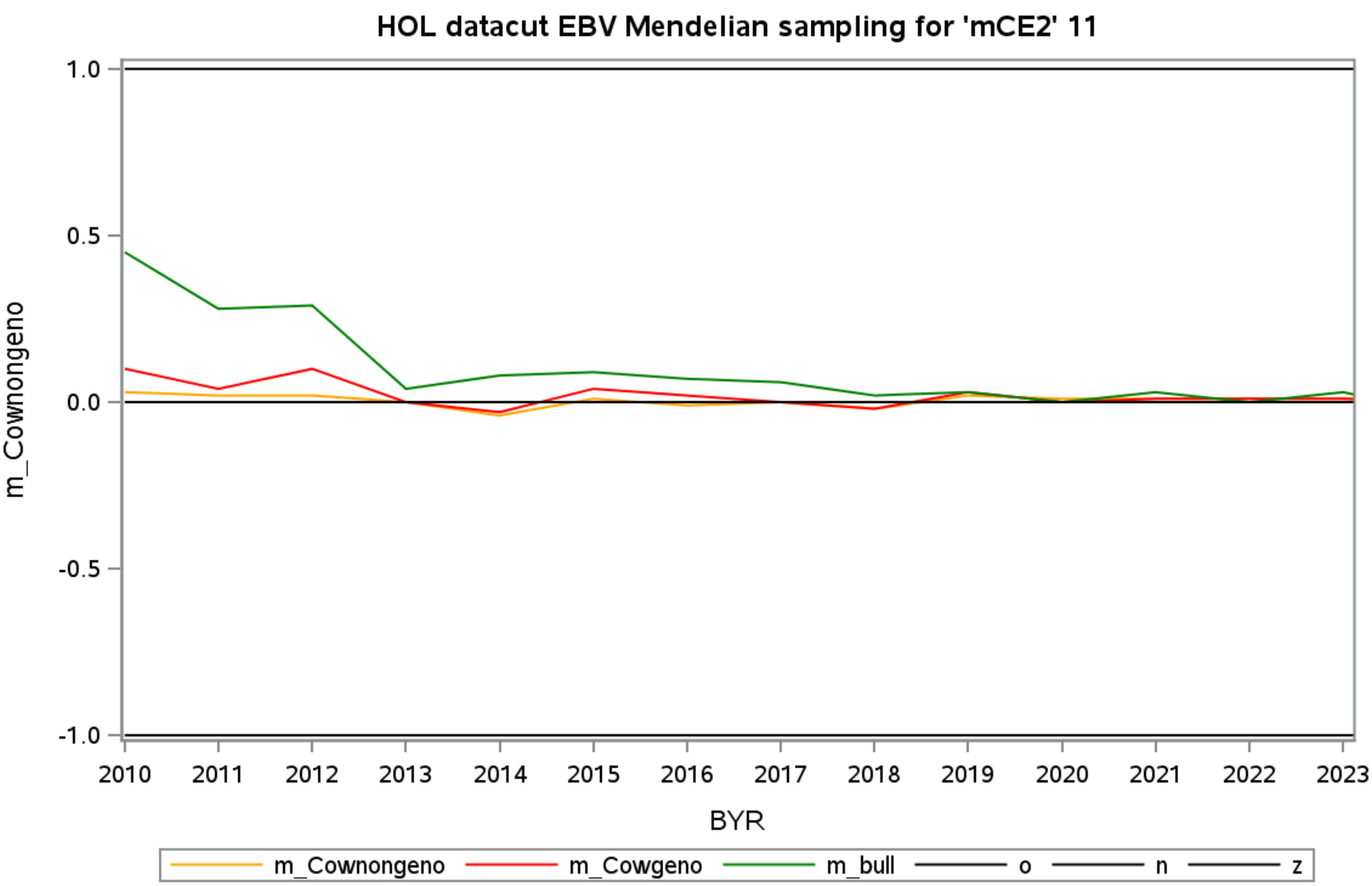
HOL datacut EBV Mendelian sampling for 'mSB2' 10

Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	-0.02	0.03	0.27	185792	1079	563
2	2011	0.01	0.04	0.27	186302	2262	883
3	2012	0.01	0.05	0.27	183568	3596	1260
4	2013	0.02	0.06	0.10	179341	5780	1367
5	2014	0.03	0.05	0.13	179249	6083	1494
6	2015	0.02	0.04	0.08	172005	8224	1632
7	2016	0.00	0.03	0.05	168838	14058	2032
8	2017	0.03	0.05	0.11	146822	21674	2169
9	2018	0.02	0.03	0.05	128423	29955	2067
10	2019	-0.02	-0.01	-0.03	121352	34580	2229
11	2020	0.00	0.00	0.01	115989	40629	2088
12	2021	0.01	-0.01	0.00	91930	34529	1605
13	2022	-0.02	-0.03	-0.04	73347	34750	1612
14	2023	0.00	0.00	0.02	73015	36964	1779
15	2024	0.01	0.01	-0.02	19706	8979	617



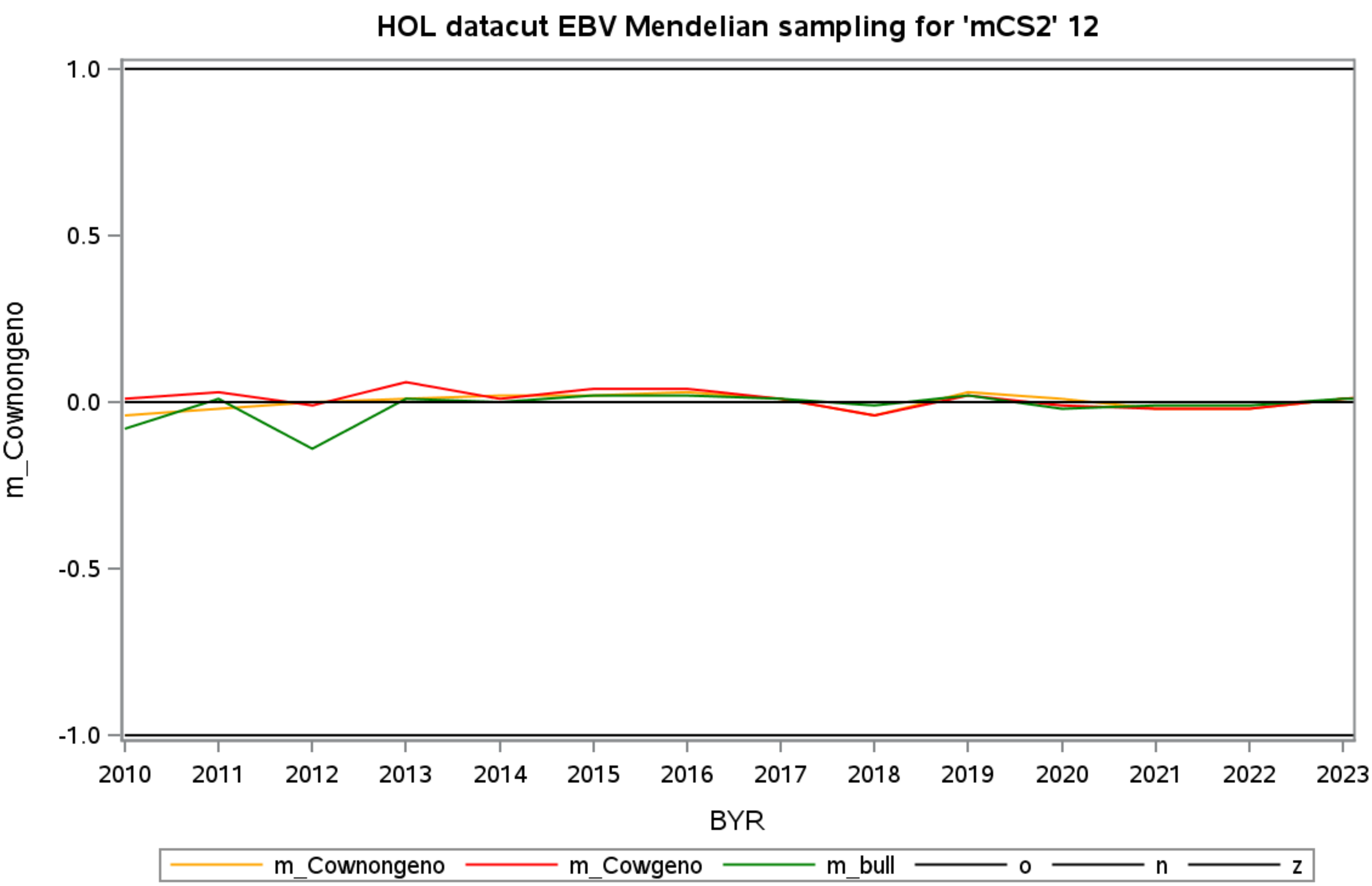
HOL datacut EBV Mendelian sampling for 'mCE2' 11

Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	0.03	0.10	0.45	185792	1079	563
2	2011	0.02	0.04	0.28	186302	2262	883
3	2012	0.02	0.10	0.29	183568	3596	1260
4	2013	0.00	0.00	0.04	179341	5780	1367
5	2014	-0.04	-0.03	0.08	179249	6083	1494
6	2015	0.01	0.04	0.09	172005	8224	1632
7	2016	-0.01	0.02	0.07	168838	14058	2032
8	2017	0.00	0.00	0.06	146822	21674	2169
9	2018	-0.02	-0.02	0.02	128423	29955	2067
10	2019	0.02	0.03	0.03	121352	34580	2229
11	2020	0.01	0.00	0.00	115989	40629	2088
12	2021	0.01	0.01	0.03	91930	34529	1605
13	2022	0.01	0.01	0.00	73347	34750	1612
14	2023	0.01	0.01	0.03	73015	36964	1779
15	2024	0.01	0.00	-0.03	19706	8979	617

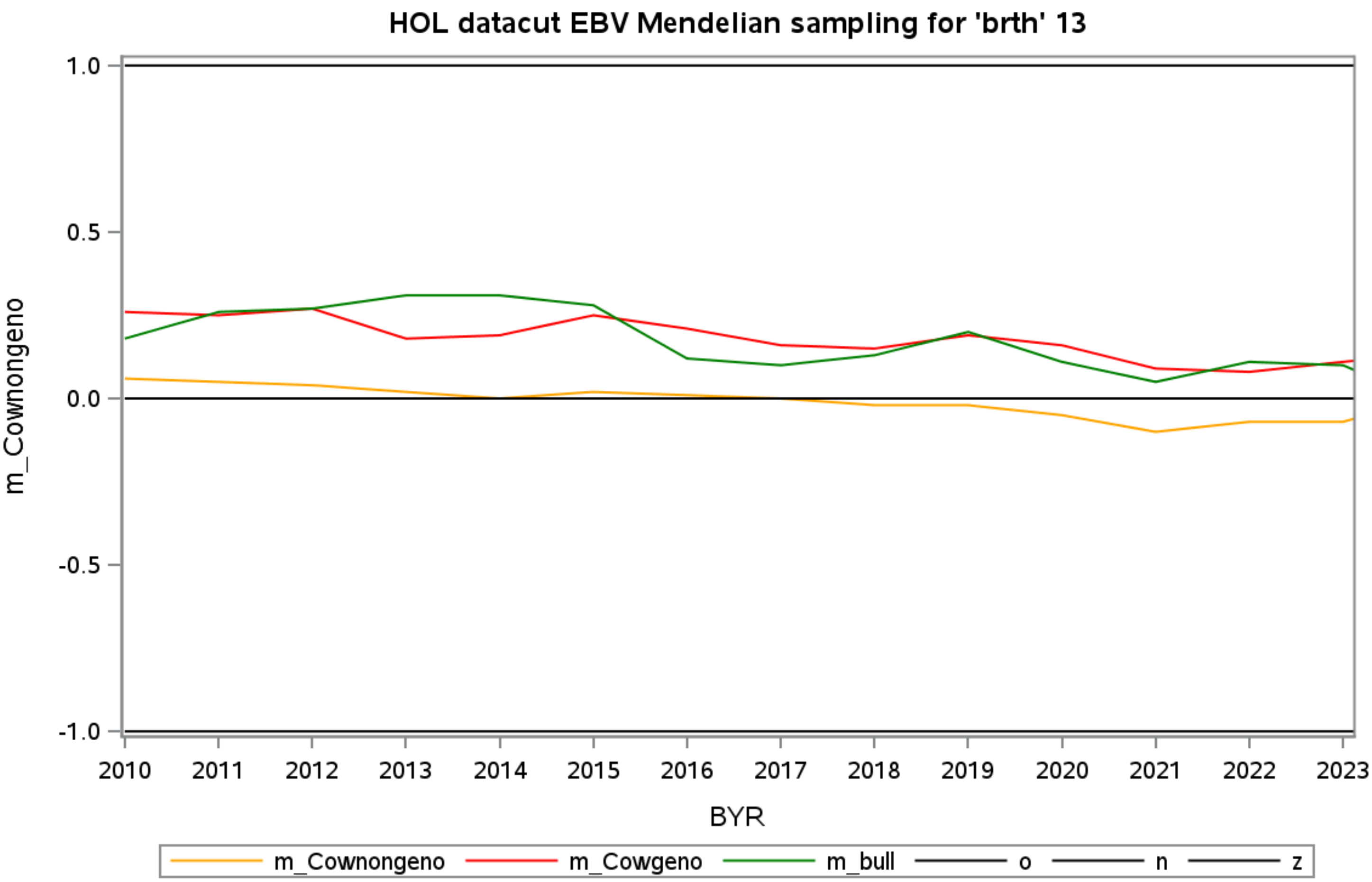


HOL datacut EBV Mendelian sampling for 'mCS2' 12

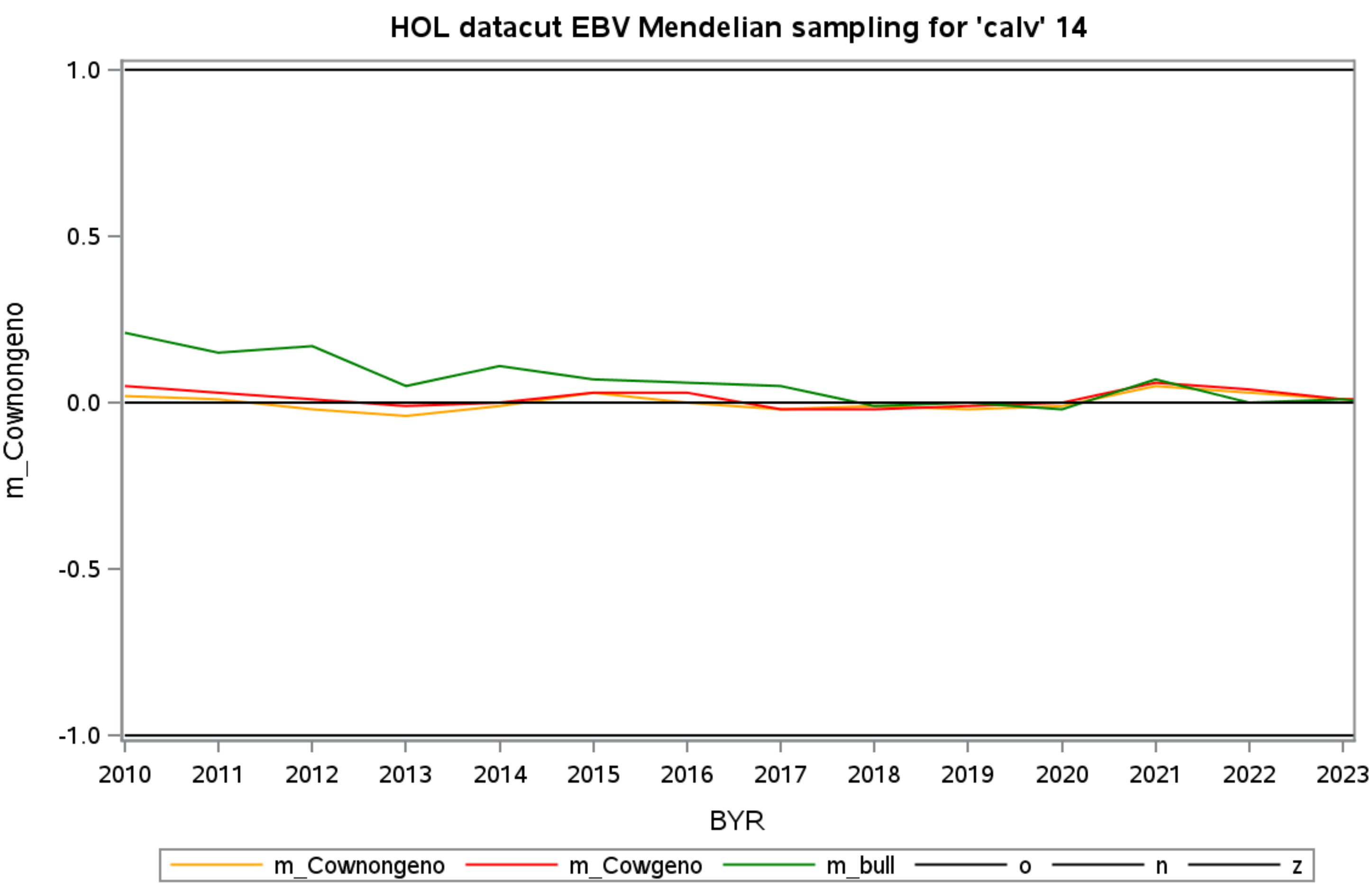
Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	-0.04	0.01	-0.08	185792	1079	563
2	2011	-0.02	0.03	0.01	186302	2262	883
3	2012	0.00	-0.01	-0.14	183568	3596	1260
4	2013	0.01	0.06	0.01	179341	5780	1367
5	2014	0.02	0.01	0.00	179249	6083	1494
6	2015	0.02	0.04	0.02	172005	8224	1632
7	2016	0.03	0.04	0.02	168838	14058	2032
8	2017	0.01	0.01	0.01	146822	21674	2169
9	2018	-0.04	-0.04	-0.01	128423	29955	2067
10	2019	0.03	0.02	0.02	121352	34580	2229
11	2020	0.01	-0.01	-0.02	115989	40629	2088
12	2021	-0.02	-0.02	-0.01	91930	34529	1605
13	2022	-0.02	-0.02	-0.01	73347	34750	1612
14	2023	0.01	0.01	0.01	73015	36964	1779
15	2024	0.03	0.03	0.01	19706	8979	617



Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	0.06	0.26	0.18	185792	1079	563
2	2011	0.05	0.25	0.26	186302	2262	883
3	2012	0.04	0.27	0.27	183568	3596	1260
4	2013	0.02	0.18	0.31	179341	5780	1367
5	2014	0.00	0.19	0.31	179249	6083	1494
6	2015	0.02	0.25	0.28	172005	8224	1632
7	2016	0.01	0.21	0.12	168838	14058	2032
8	2017	0.00	0.16	0.10	146822	21674	2169
9	2018	-0.02	0.15	0.13	128423	29955	2067
10	2019	-0.02	0.19	0.20	121352	34580	2229
11	2020	-0.05	0.16	0.11	115989	40629	2088
12	2021	-0.10	0.09	0.05	91930	34529	1605
13	2022	-0.07	0.08	0.11	73347	34750	1612
14	2023	-0.07	0.11	0.10	73015	36964	1779
15	2024	0.01	0.14	-0.02	19706	8979	617

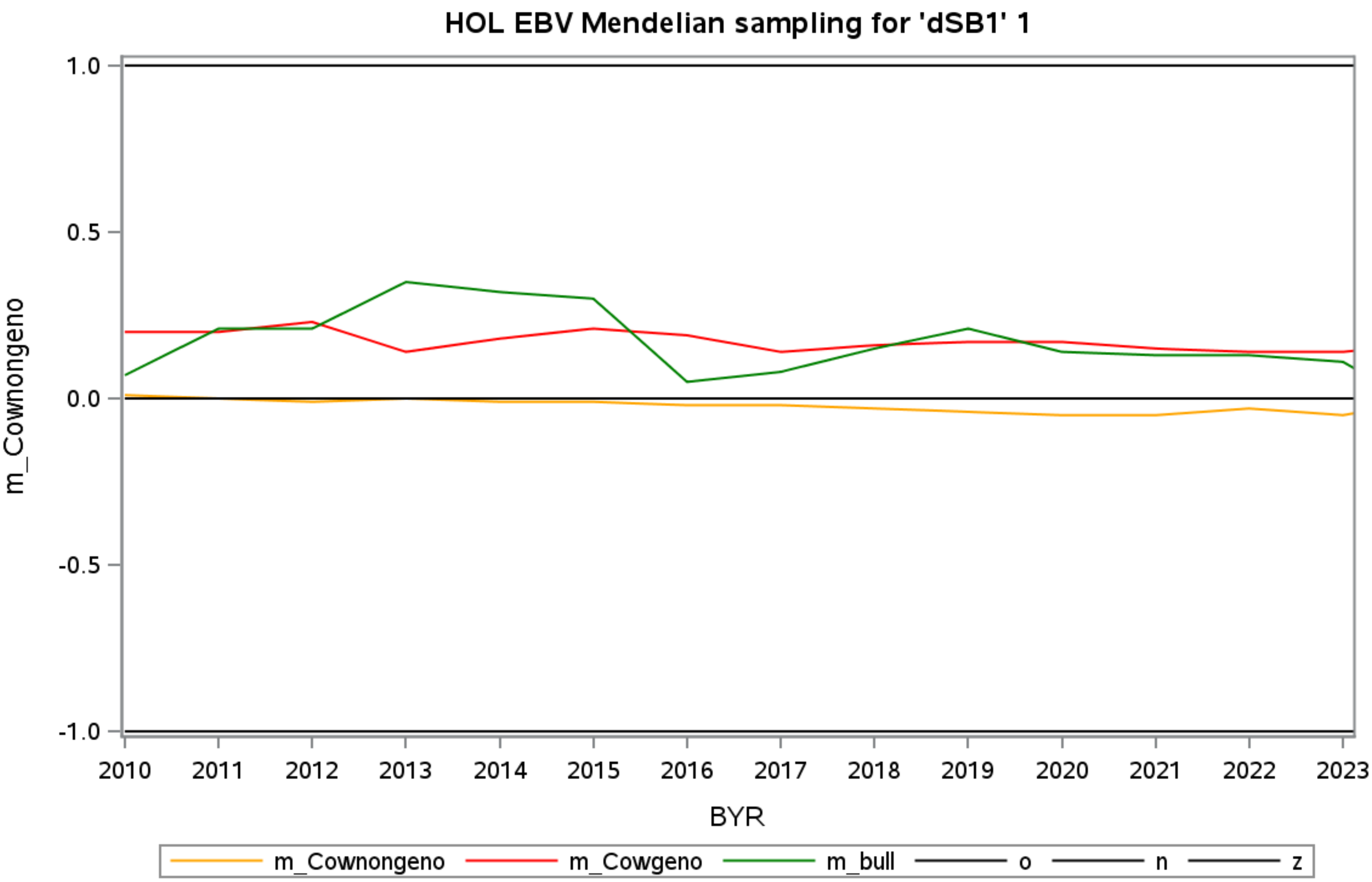


Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	0.02	0.05	0.21	185792	1079	563
2	2011	0.01	0.03	0.15	186302	2262	883
3	2012	-0.02	0.01	0.17	183568	3596	1260
4	2013	-0.04	-0.01	0.05	179341	5780	1367
5	2014	-0.01	0.00	0.11	179249	6083	1494
6	2015	0.03	0.03	0.07	172005	8224	1632
7	2016	0.00	0.03	0.06	168838	14058	2032
8	2017	-0.02	-0.02	0.05	146822	21674	2169
9	2018	-0.01	-0.02	-0.01	128423	29955	2067
10	2019	-0.02	-0.01	0.00	121352	34580	2229
11	2020	-0.01	0.00	-0.02	115989	40629	2088
12	2021	0.05	0.06	0.07	91930	34529	1605
13	2022	0.03	0.04	0.00	73347	34750	1612
14	2023	0.01	0.01	0.01	73015	36964	1779
15	2024	0.01	0.01	-0.02	19706	8979	617

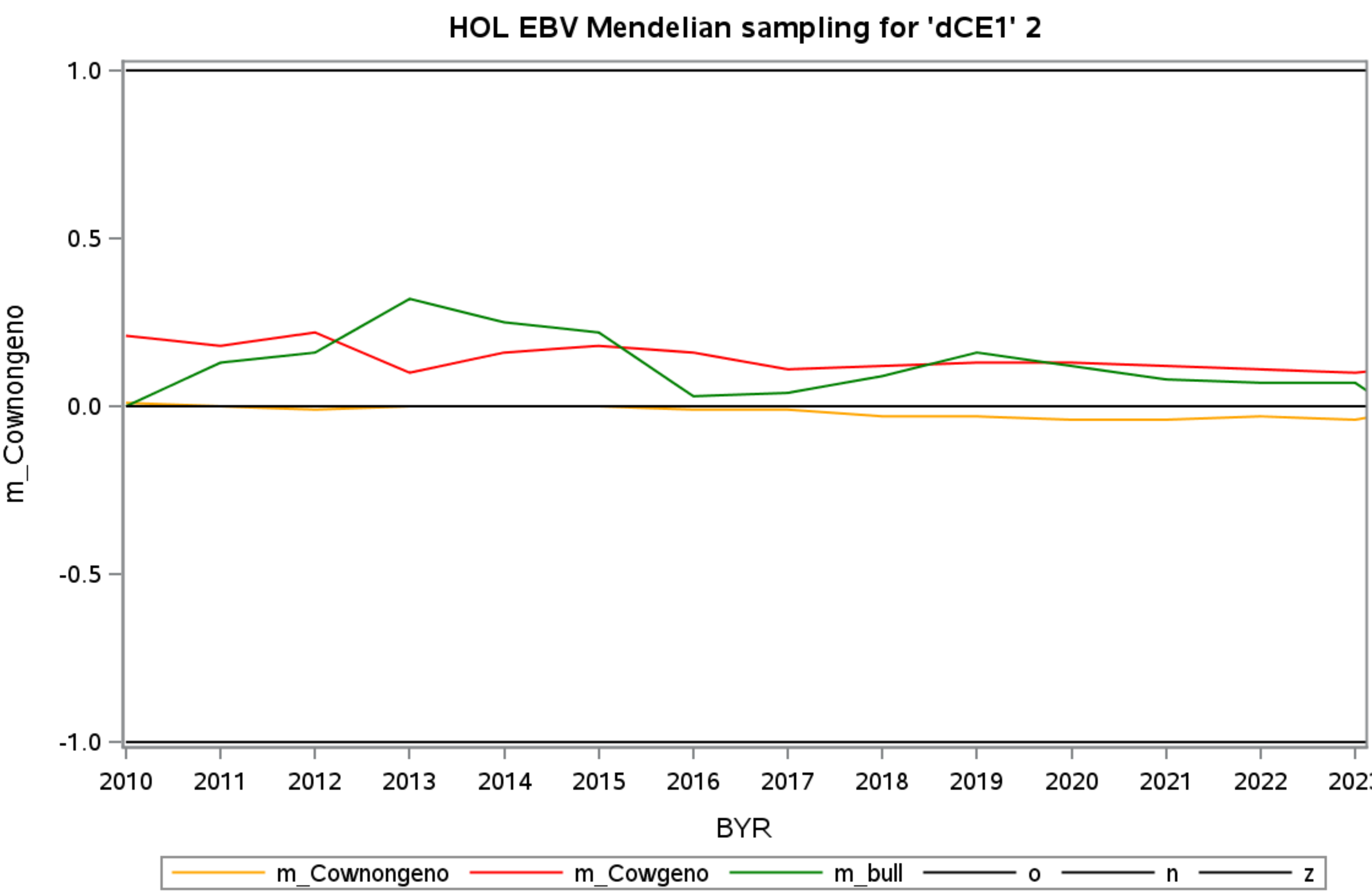


HOL EBV Mendelian sampling for 'dSB1' 1

Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	0.01	0.20	0.07	187855	1049	450
2	2011	0.00	0.20	0.21	188460	2208	775
3	2012	-0.01	0.23	0.21	185586	3512	1116
4	2013	0.00	0.14	0.35	181316	5627	1161
5	2014	-0.01	0.18	0.32	180843	5798	1308
6	2015	-0.01	0.21	0.30	173657	7732	1263
7	2016	-0.02	0.19	0.05	170212	13072	1512
8	2017	-0.02	0.14	0.08	148138	20310	1738
9	2018	-0.03	0.16	0.15	129721	27800	1662
10	2019	-0.04	0.17	0.21	122536	31531	1832
11	2020	-0.05	0.17	0.14	117139	36088	1687
12	2021	-0.05	0.15	0.13	93113	29995	1142
13	2022	-0.03	0.14	0.13	74526	28724	1170
14	2023	-0.05	0.14	0.11	74158	29912	1231
15	2024	0.00	0.17	-0.05	20012	5351	256

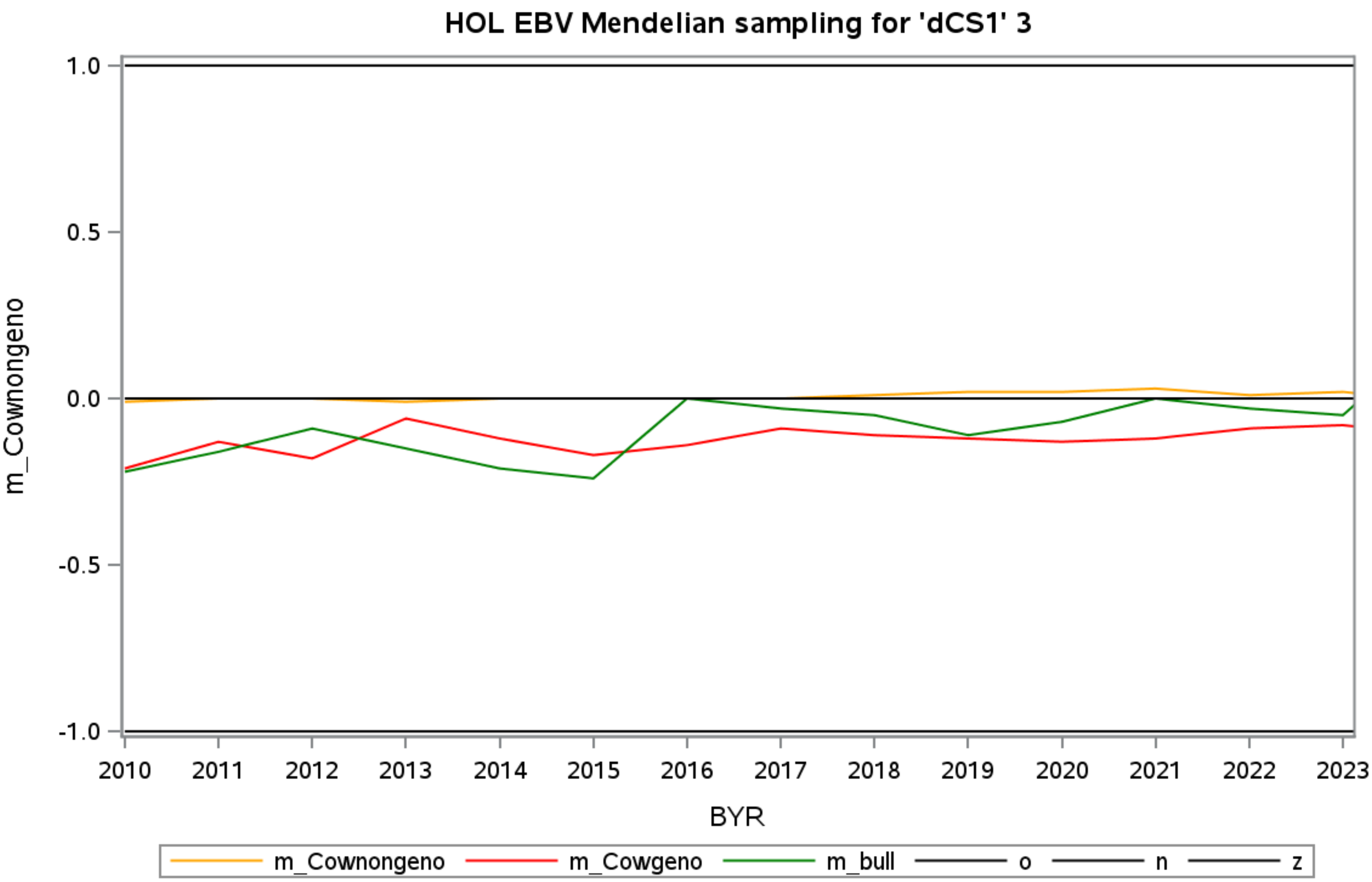


Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	0.01	0.21	0.00	187855	1049	450
2	2011	0.00	0.18	0.13	188460	2208	775
3	2012	-0.01	0.22	0.16	185586	3512	1116
4	2013	0.00	0.10	0.32	181316	5627	1161
5	2014	0.00	0.16	0.25	180843	5798	1308
6	2015	0.00	0.18	0.22	173657	7732	1263
7	2016	-0.01	0.16	0.03	170212	13072	1512
8	2017	-0.01	0.11	0.04	148138	20310	1738
9	2018	-0.03	0.12	0.09	129721	27800	1662
10	2019	-0.03	0.13	0.16	122536	31531	1832
11	2020	-0.04	0.13	0.12	117139	36088	1687
12	2021	-0.04	0.12	0.08	93113	29995	1142
13	2022	-0.03	0.11	0.07	74526	28724	1170
14	2023	-0.04	0.10	0.07	74158	29912	1231
15	2024	0.01	0.13	-0.12	20012	5351	256



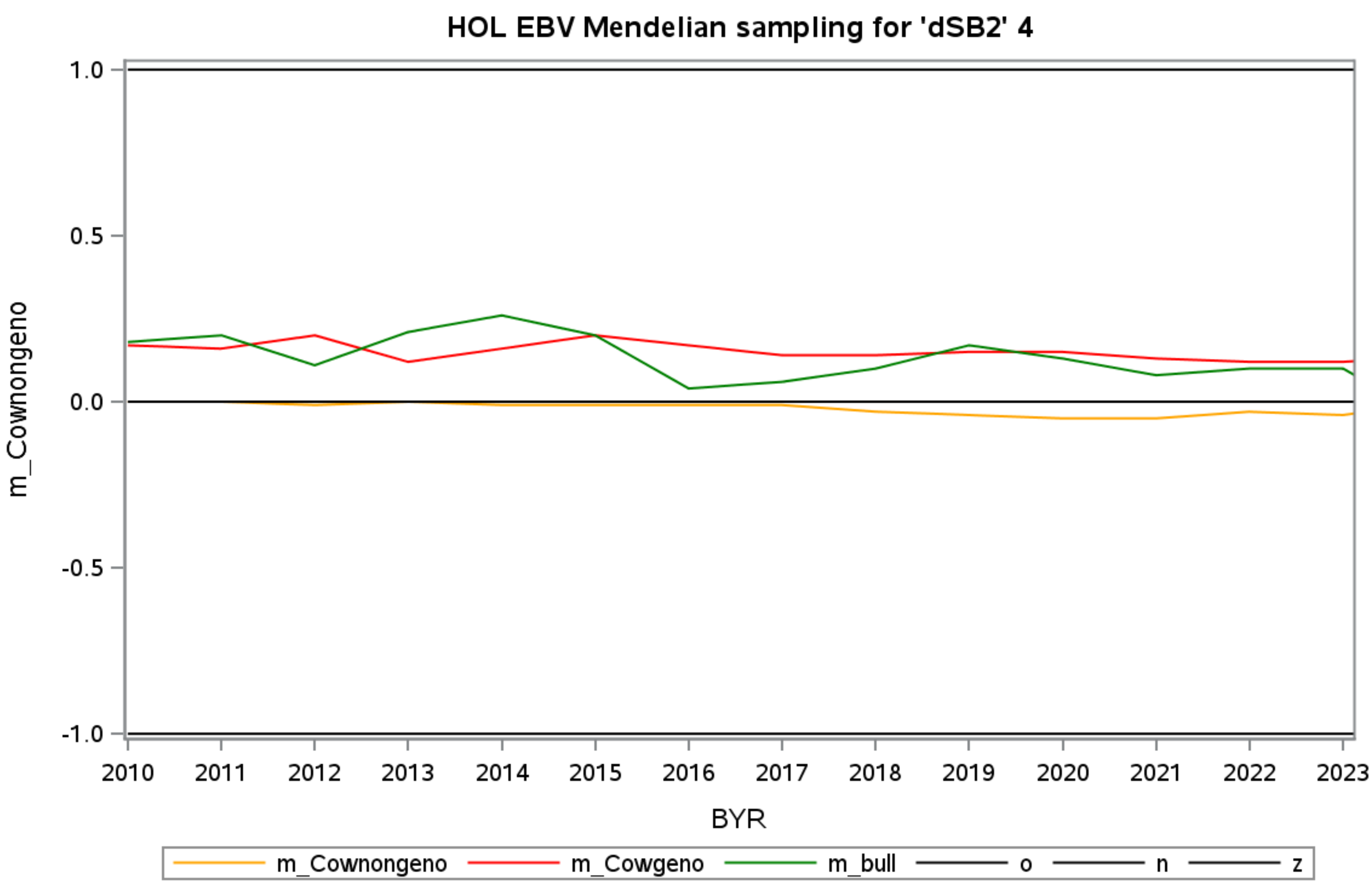
HOL EBV Mendelian sampling for 'dCS1' 3

Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	-0.01	-0.21	-0.22	187855	1049	450
2	2011	0.00	-0.13	-0.16	188460	2208	775
3	2012	0.00	-0.18	-0.09	185586	3512	1116
4	2013	-0.01	-0.06	-0.15	181316	5627	1161
5	2014	0.00	-0.12	-0.21	180843	5798	1308
6	2015	0.00	-0.17	-0.24	173657	7732	1263
7	2016	0.00	-0.14	0.00	170212	13072	1512
8	2017	0.00	-0.09	-0.03	148138	20310	1738
9	2018	0.01	-0.11	-0.05	129721	27800	1662
10	2019	0.02	-0.12	-0.11	122536	31531	1832
11	2020	0.02	-0.13	-0.07	117139	36088	1687
12	2021	0.03	-0.12	0.00	93113	29995	1142
13	2022	0.01	-0.09	-0.03	74526	28724	1170
14	2023	0.02	-0.08	-0.05	74158	29912	1231
15	2024	-0.01	-0.11	0.20	20012	5351	256

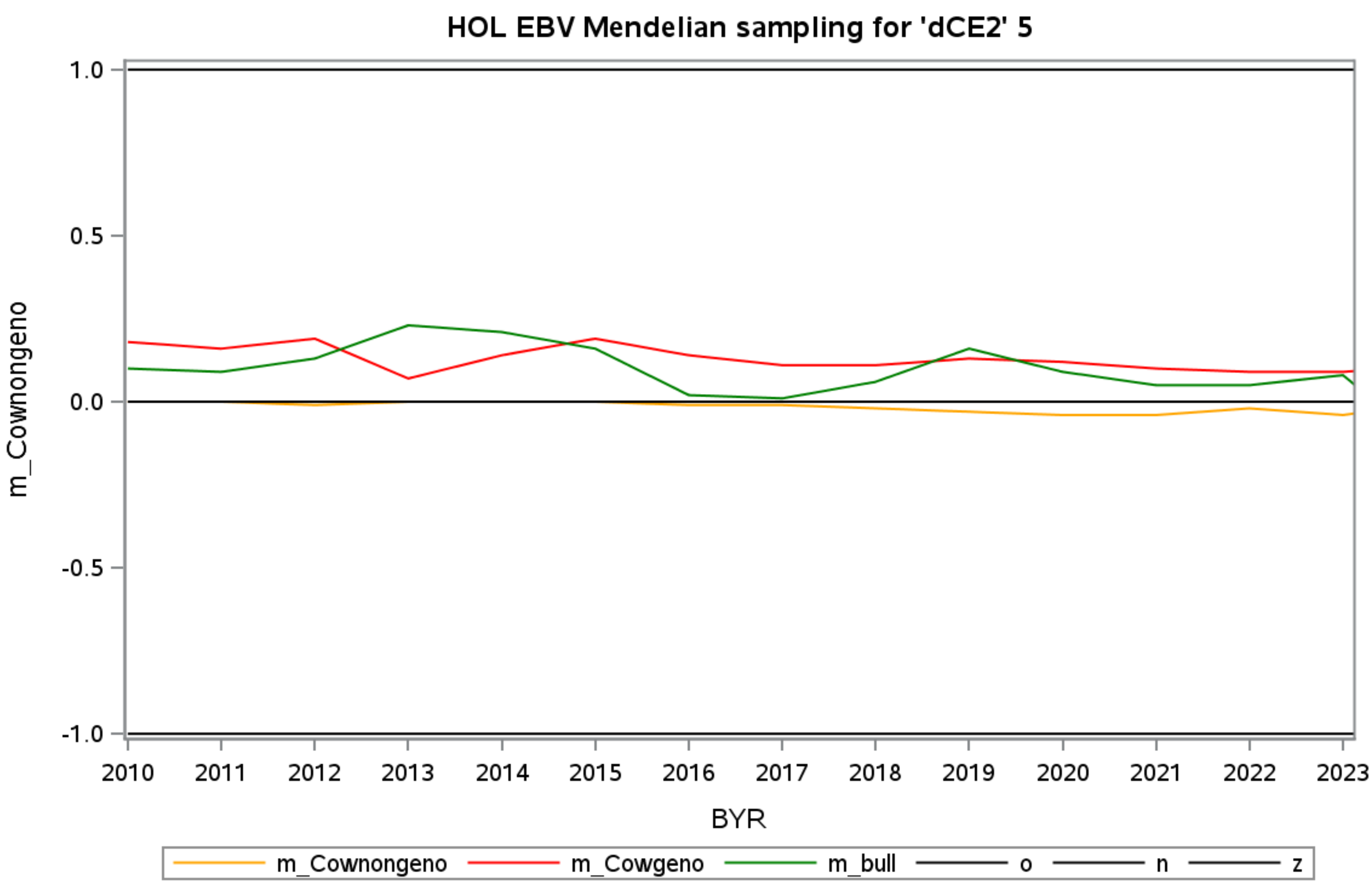


HOL EBV Mendelian sampling for 'dSB2' 4

Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	0.00	0.17	0.18	187855	1049	450
2	2011	0.00	0.16	0.20	188460	2208	775
3	2012	-0.01	0.20	0.11	185586	3512	1116
4	2013	0.00	0.12	0.21	181316	5627	1161
5	2014	-0.01	0.16	0.26	180843	5798	1308
6	2015	-0.01	0.20	0.20	173657	7732	1263
7	2016	-0.01	0.17	0.04	170212	13072	1512
8	2017	-0.01	0.14	0.06	148138	20310	1738
9	2018	-0.03	0.14	0.10	129721	27800	1662
10	2019	-0.04	0.15	0.17	122536	31531	1832
11	2020	-0.05	0.15	0.13	117139	36088	1687
12	2021	-0.05	0.13	0.08	93113	29995	1142
13	2022	-0.03	0.12	0.10	74526	28724	1170
14	2023	-0.04	0.12	0.10	74158	29912	1231
15	2024	0.00	0.14	-0.06	20012	5351	256

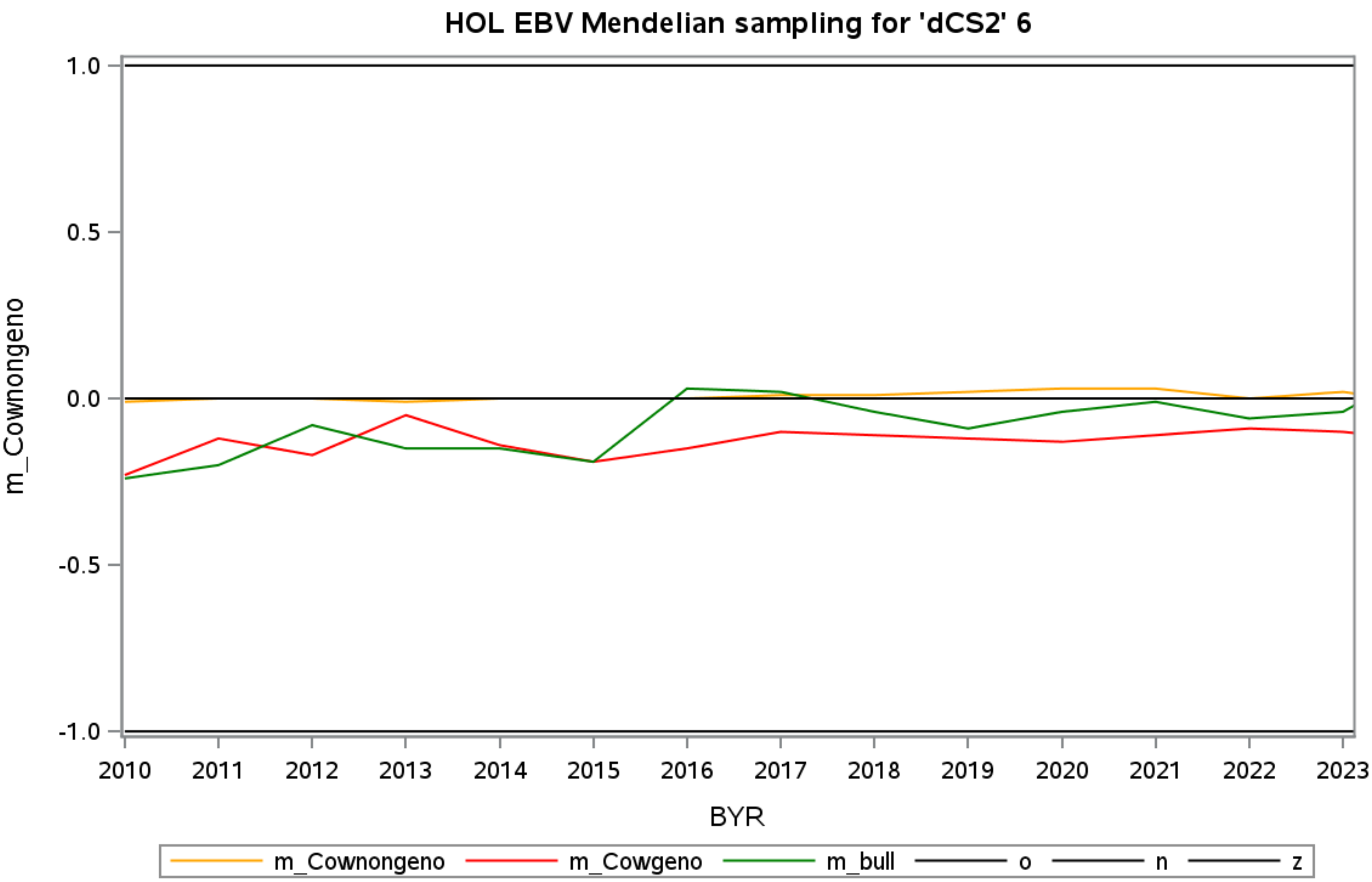


Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	0.00	0.18	0.10	187855	1049	450
2	2011	0.00	0.16	0.09	188460	2208	775
3	2012	-0.01	0.19	0.13	185586	3512	1116
4	2013	0.00	0.07	0.23	181316	5627	1161
5	2014	0.00	0.14	0.21	180843	5798	1308
6	2015	0.00	0.19	0.16	173657	7732	1263
7	2016	-0.01	0.14	0.02	170212	13072	1512
8	2017	-0.01	0.11	0.01	148138	20310	1738
9	2018	-0.02	0.11	0.06	129721	27800	1662
10	2019	-0.03	0.13	0.16	122536	31531	1832
11	2020	-0.04	0.12	0.09	117139	36088	1687
12	2021	-0.04	0.10	0.05	93113	29995	1142
13	2022	-0.02	0.09	0.05	74526	28724	1170
14	2023	-0.04	0.09	0.08	74158	29912	1231
15	2024	0.00	0.11	-0.15	20012	5351	256

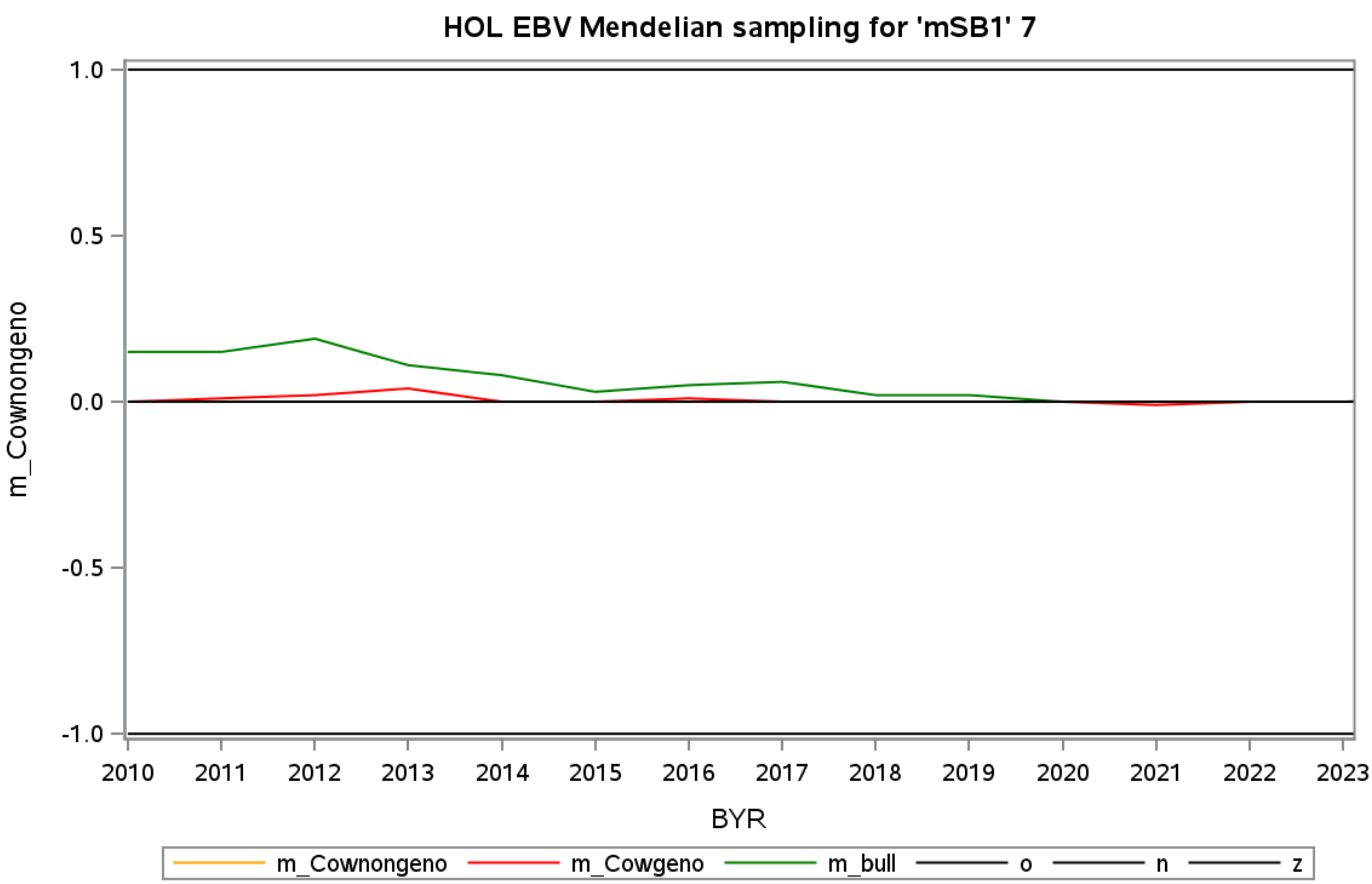


HOL EBV Mendelian sampling for 'dCS2' 6

Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	-0.01	-0.23	-0.24	187855	1049	450
2	2011	0.00	-0.12	-0.20	188460	2208	775
3	2012	0.00	-0.17	-0.08	185586	3512	1116
4	2013	-0.01	-0.05	-0.15	181316	5627	1161
5	2014	0.00	-0.14	-0.15	180843	5798	1308
6	2015	0.00	-0.19	-0.19	173657	7732	1263
7	2016	0.00	-0.15	0.03	170212	13072	1512
8	2017	0.01	-0.10	0.02	148138	20310	1738
9	2018	0.01	-0.11	-0.04	129721	27800	1662
10	2019	0.02	-0.12	-0.09	122536	31531	1832
11	2020	0.03	-0.13	-0.04	117139	36088	1687
12	2021	0.03	-0.11	-0.01	93113	29995	1142
13	2022	0.00	-0.09	-0.06	74526	28724	1170
14	2023	0.02	-0.10	-0.04	74158	29912	1231
15	2024	-0.02	-0.13	0.12	20012	5351	256

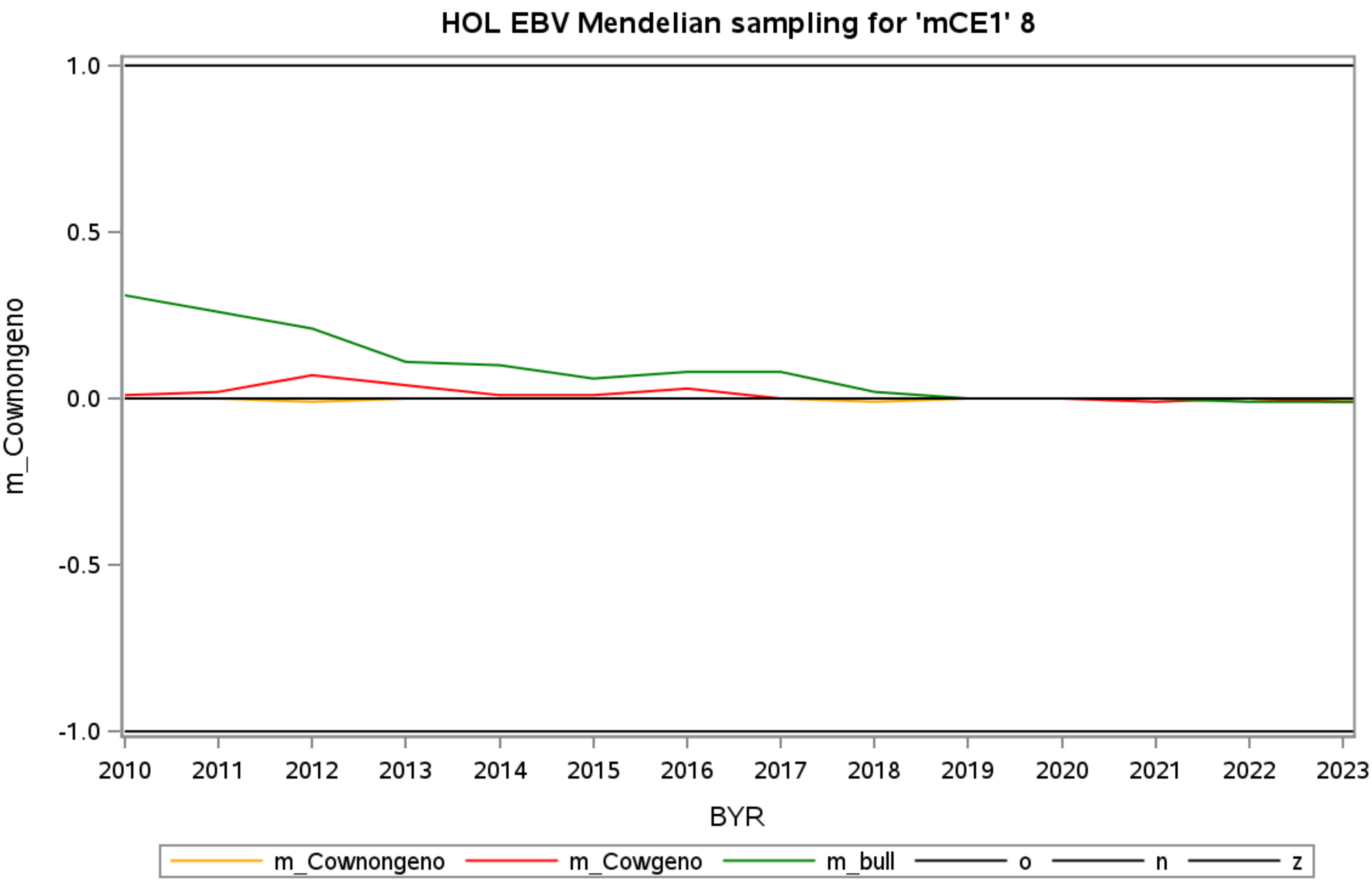


Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	0	0.00	0.15	187855	1049	450
2	2011	0	0.01	0.15	188460	2208	775
3	2012	0	0.02	0.19	185586	3512	1116
4	2013	0	0.04	0.11	181316	5627	1161
5	2014	0	0.00	0.08	180843	5798	1308
6	2015	0	0.00	0.03	173657	7732	1263
7	2016	0	0.01	0.05	170212	13072	1512
8	2017	0	0.00	0.06	148138	20310	1738
9	2018	0	0.00	0.02	129721	27800	1662
10	2019	0	0.00	0.02	122536	31531	1832
11	2020	0	0.00	0.00	117139	36088	1687
12	2021	0	-0.01	0.00	93113	29995	1142
13	2022	0	0.00	0.00	74526	28724	1170
14	2023	0	0.00	0.00	74158	29912	1231
15	2024	0	0.00	0.01	20012	5351	256



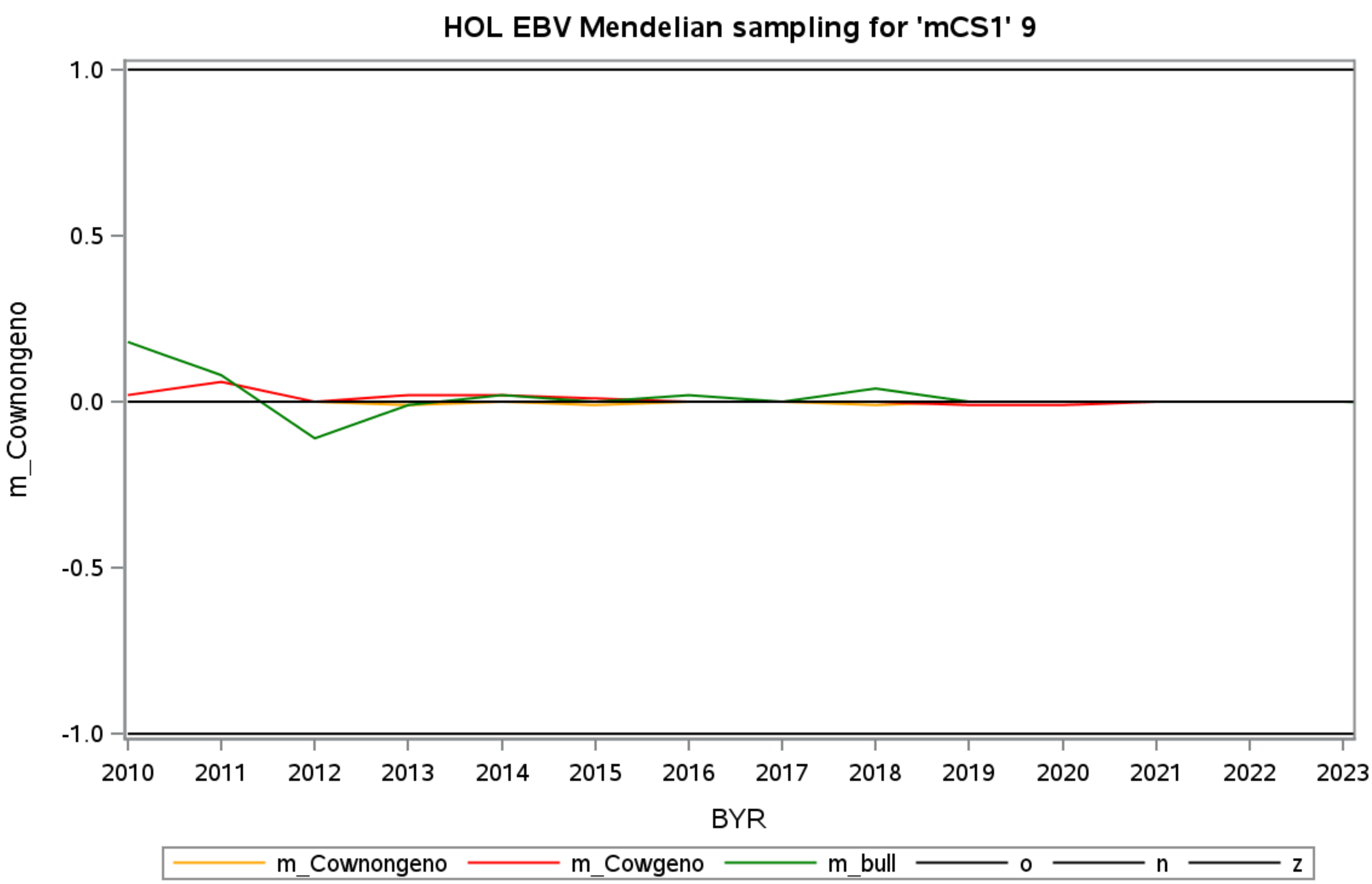
HOL EBV Mendelian sampling for 'mCE1' 8

Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	0.00	0.01	0.31	187855	1049	450
2	2011	0.00	0.02	0.26	188460	2208	775
3	2012	-0.01	0.07	0.21	185586	3512	1116
4	2013	0.00	0.04	0.11	181316	5627	1161
5	2014	0.00	0.01	0.10	180843	5798	1308
6	2015	0.00	0.01	0.06	173657	7732	1263
7	2016	0.00	0.03	0.08	170212	13072	1512
8	2017	0.00	0.00	0.08	148138	20310	1738
9	2018	-0.01	0.00	0.02	129721	27800	1662
10	2019	0.00	0.00	0.00	122536	31531	1832
11	2020	0.00	0.00	0.00	117139	36088	1687
12	2021	0.00	-0.01	0.00	93113	29995	1142
13	2022	0.00	0.00	-0.01	74526	28724	1170
14	2023	-0.01	-0.01	-0.01	74158	29912	1231
15	2024	-0.01	-0.01	-0.01	20012	5351	256



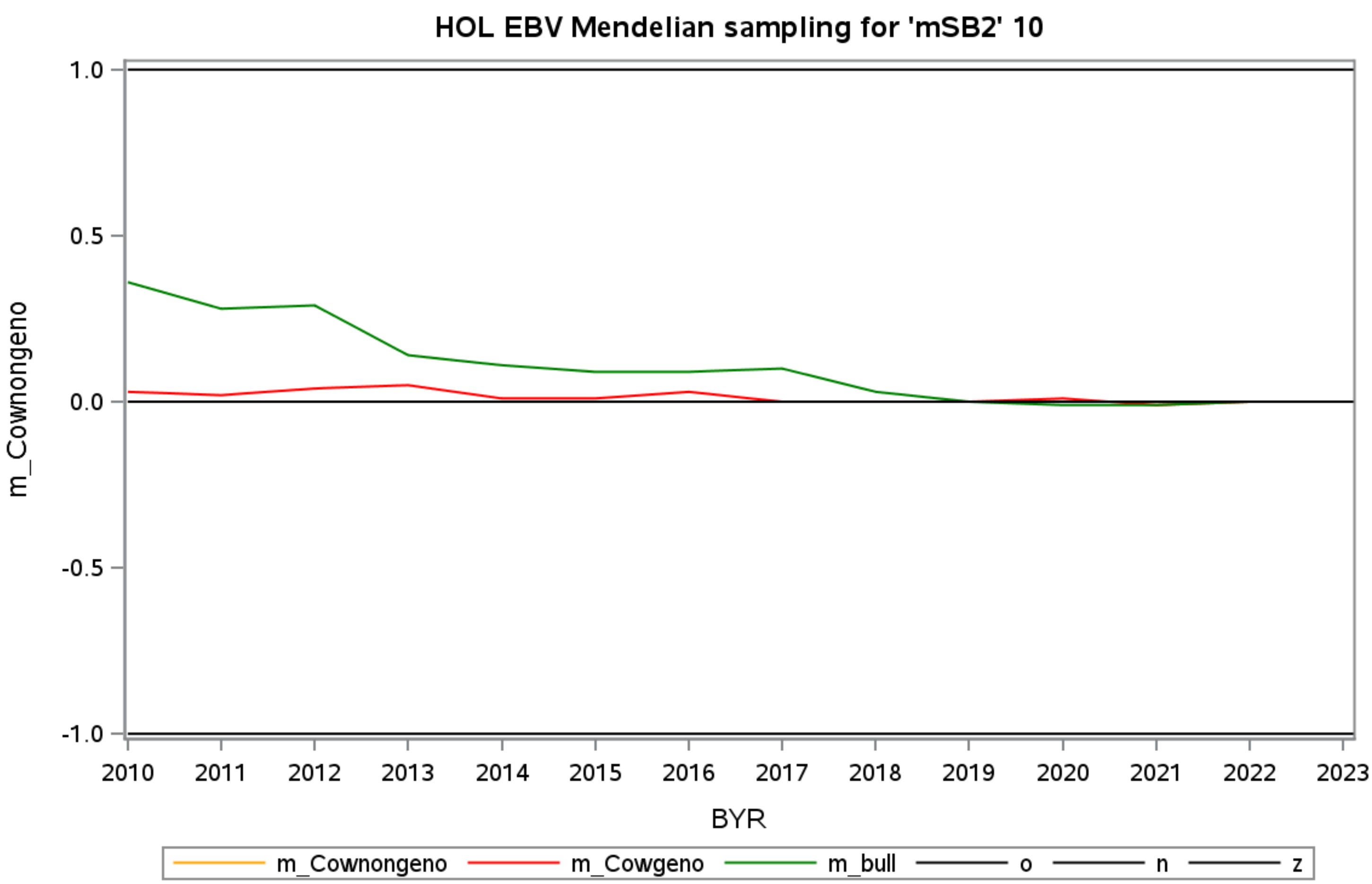
HOL EBV Mendelian sampling for 'mCS1' 9

Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	0.00	0.02	0.18	187855	1049	450
2	2011	0.00	0.06	0.08	188460	2208	775
3	2012	0.00	0.00	-0.11	185586	3512	1116
4	2013	-0.01	0.02	-0.01	181316	5627	1161
5	2014	0.00	0.02	0.02	180843	5798	1308
6	2015	-0.01	0.01	0.00	173657	7732	1263
7	2016	0.00	0.00	0.02	170212	13072	1512
8	2017	0.00	0.00	0.00	148138	20310	1738
9	2018	-0.01	0.00	0.04	129721	27800	1662
10	2019	0.00	-0.01	0.00	122536	31531	1832
11	2020	0.00	-0.01	0.00	117139	36088	1687
12	2021	0.00	0.00	0.00	93113	29995	1142
13	2022	0.00	0.00	0.00	74526	28724	1170
14	2023	0.00	0.00	0.00	74158	29912	1231
15	2024	0.00	0.00	-0.01	20012	5351	256



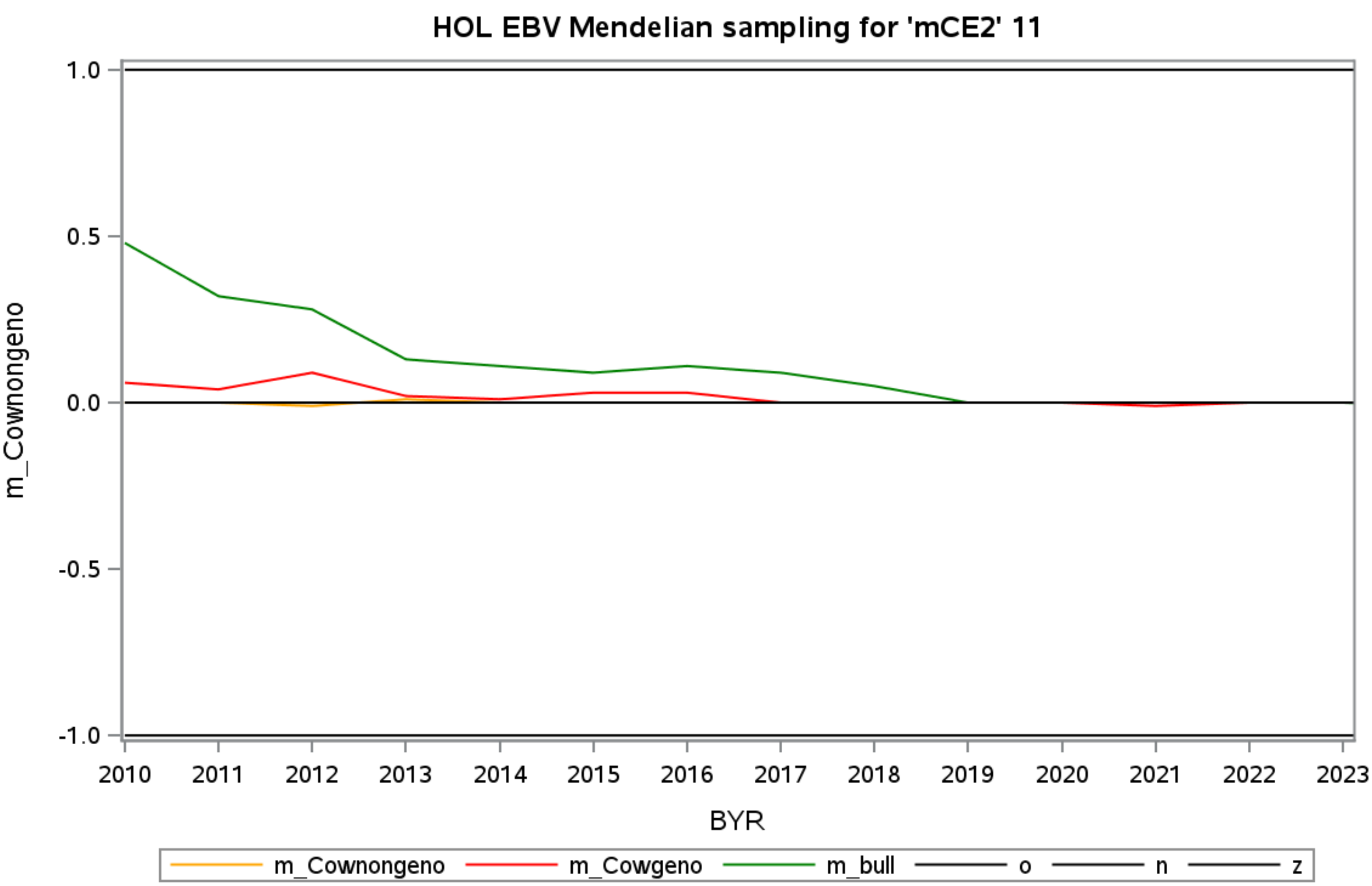
HOL EBV Mendelian sampling for 'mSB2' 10

Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	0	0.03	0.36	187855	1049	450
2	2011	0	0.02	0.28	188460	2208	775
3	2012	0	0.04	0.29	185586	3512	1116
4	2013	0	0.05	0.14	181316	5627	1161
5	2014	0	0.01	0.11	180843	5798	1308
6	2015	0	0.01	0.09	173657	7732	1263
7	2016	0	0.03	0.09	170212	13072	1512
8	2017	0	0.00	0.10	148138	20310	1738
9	2018	0	0.00	0.03	129721	27800	1662
10	2019	0	0.00	0.00	122536	31531	1832
11	2020	0	0.01	-0.01	117139	36088	1687
12	2021	0	-0.01	-0.01	93113	29995	1142
13	2022	0	0.00	0.00	74526	28724	1170
14	2023	0	0.00	0.00	74158	29912	1231
15	2024	0	0.00	0.00	20012	5351	256



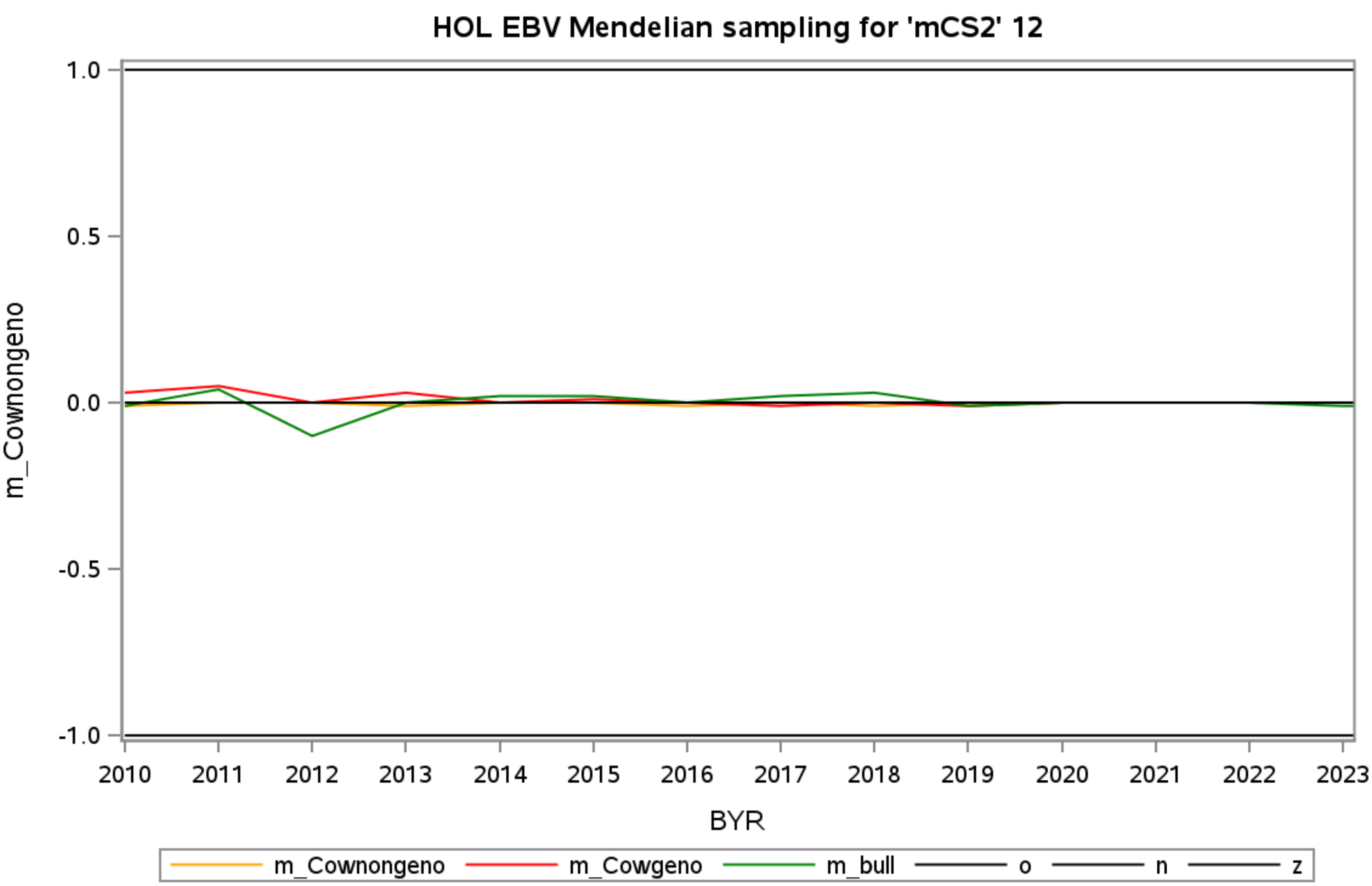
HOL EBV Mendelian sampling for 'mCE2' 11

Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	0.00	0.06	0.48	187855	1049	450
2	2011	0.00	0.04	0.32	188460	2208	775
3	2012	-0.01	0.09	0.28	185586	3512	1116
4	2013	0.01	0.02	0.13	181316	5627	1161
5	2014	0.00	0.01	0.11	180843	5798	1308
6	2015	0.00	0.03	0.09	173657	7732	1263
7	2016	0.00	0.03	0.11	170212	13072	1512
8	2017	0.00	0.00	0.09	148138	20310	1738
9	2018	0.00	0.00	0.05	129721	27800	1662
10	2019	0.00	0.00	0.00	122536	31531	1832
11	2020	0.00	0.00	0.00	117139	36088	1687
12	2021	0.00	-0.01	0.00	93113	29995	1142
13	2022	0.00	0.00	0.00	74526	28724	1170
14	2023	0.00	0.00	0.00	74158	29912	1231
15	2024	0.00	0.00	-0.01	20012	5351	256



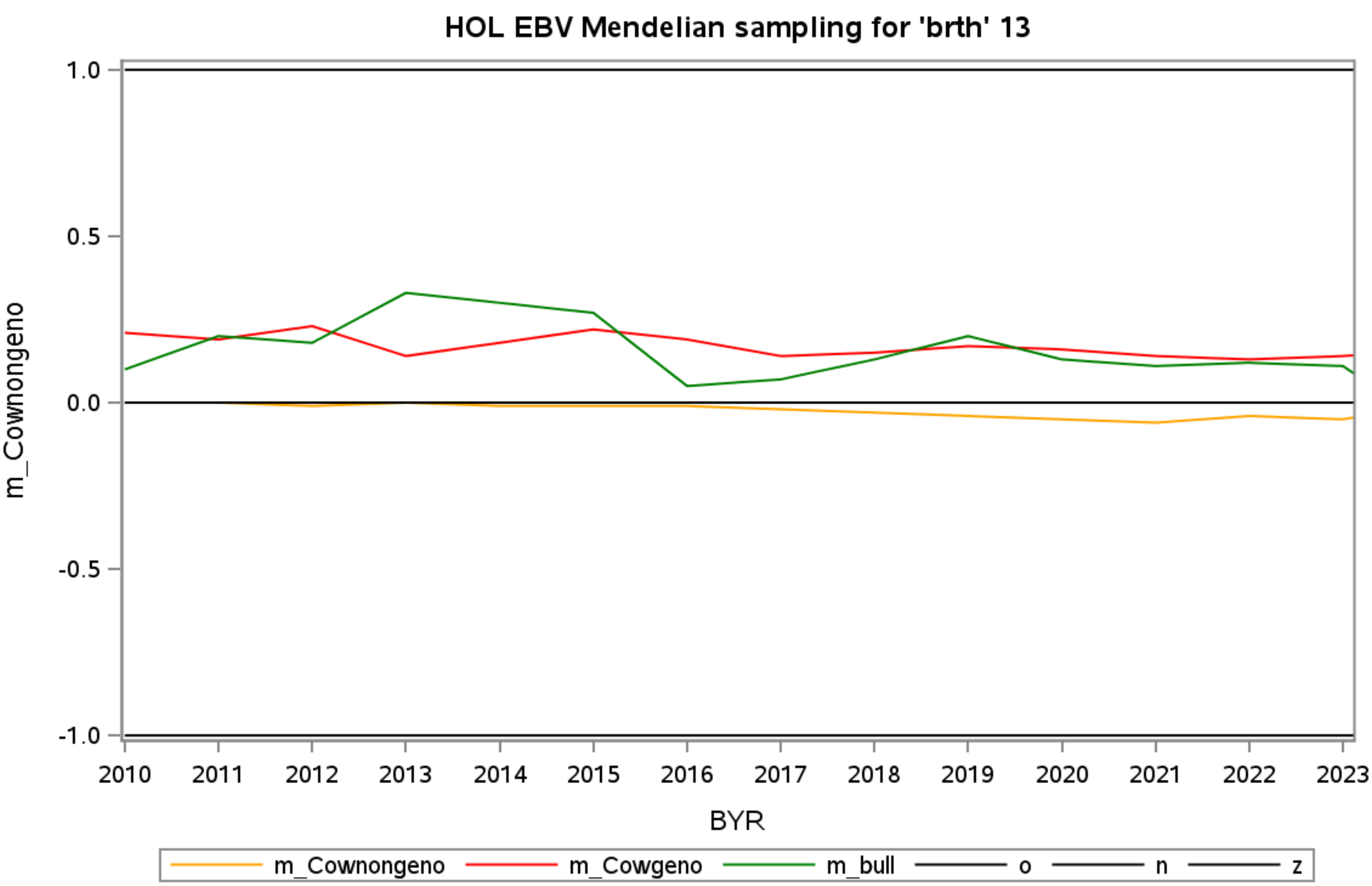
HOL EBV Mendelian sampling for 'mCS2' 12

Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	-0.01	0.03	-0.01	187855	1049	450
2	2011	0.00	0.05	0.04	188460	2208	775
3	2012	0.00	0.00	-0.10	185586	3512	1116
4	2013	-0.01	0.03	0.00	181316	5627	1161
5	2014	0.00	0.00	0.02	180843	5798	1308
6	2015	0.00	0.01	0.02	173657	7732	1263
7	2016	-0.01	0.00	0.00	170212	13072	1512
8	2017	0.00	-0.01	0.02	148138	20310	1738
9	2018	-0.01	0.00	0.03	129721	27800	1662
10	2019	0.00	-0.01	-0.01	122536	31531	1832
11	2020	0.00	0.00	0.00	117139	36088	1687
12	2021	0.00	0.00	0.00	93113	29995	1142
13	2022	0.00	0.00	0.00	74526	28724	1170
14	2023	0.00	0.00	-0.01	74158	29912	1231
15	2024	0.00	0.00	-0.01	20012	5351	256

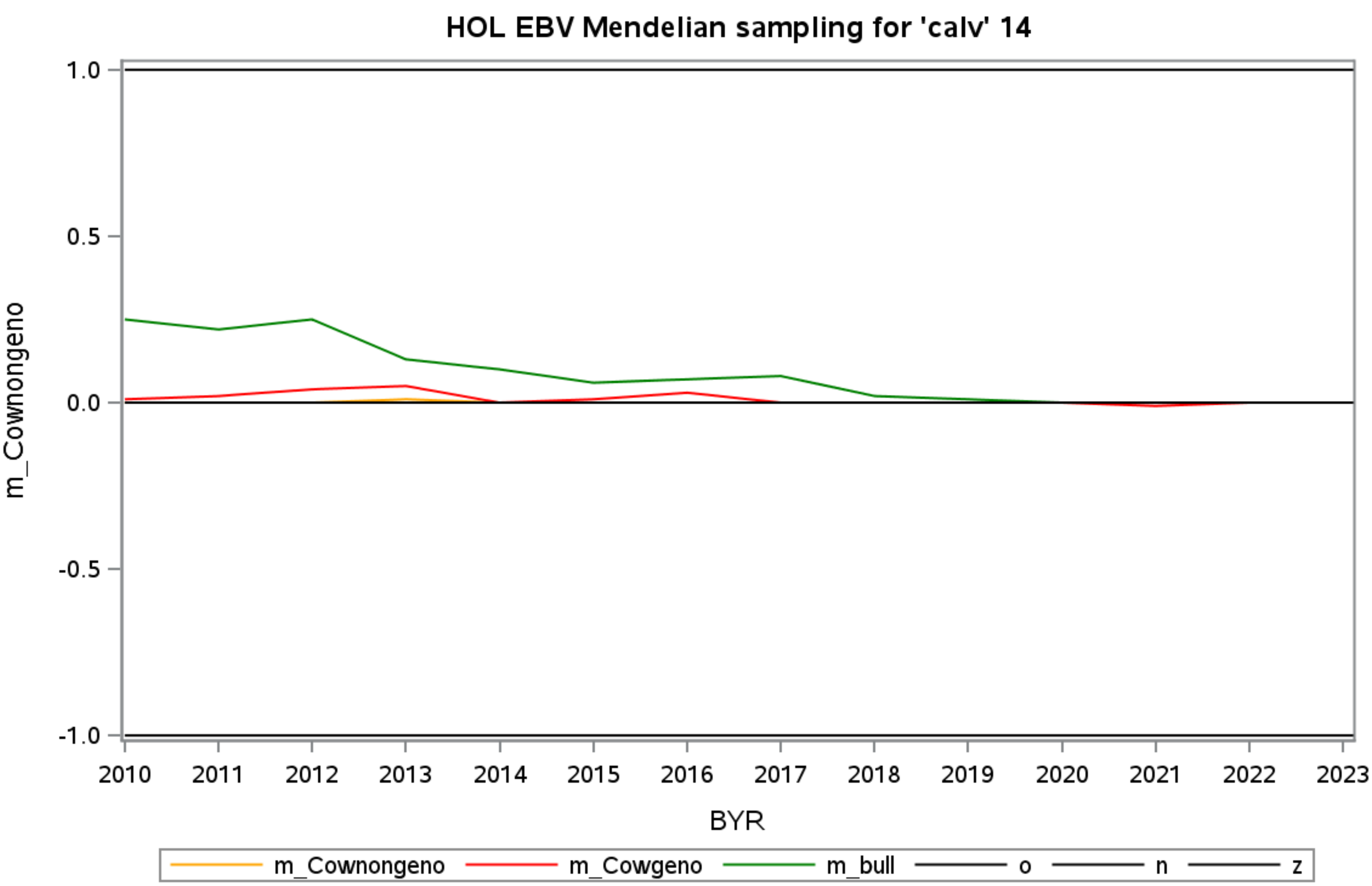


HOL EBV Mendelian sampling for 'brth' 13

Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	0.00	0.21	0.10	187855	1049	450
2	2011	0.00	0.19	0.20	188460	2208	775
3	2012	-0.01	0.23	0.18	185586	3512	1116
4	2013	0.00	0.14	0.33	181316	5627	1161
5	2014	-0.01	0.18	0.30	180843	5798	1308
6	2015	-0.01	0.22	0.27	173657	7732	1263
7	2016	-0.01	0.19	0.05	170212	13072	1512
8	2017	-0.02	0.14	0.07	148138	20310	1738
9	2018	-0.03	0.15	0.13	129721	27800	1662
10	2019	-0.04	0.17	0.20	122536	31531	1832
11	2020	-0.05	0.16	0.13	117139	36088	1687
12	2021	-0.06	0.14	0.11	93113	29995	1142
13	2022	-0.04	0.13	0.12	74526	28724	1170
14	2023	-0.05	0.14	0.11	74158	29912	1231
15	2024	0.00	0.16	-0.08	20012	5351	256



Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	0.00	0.01	0.25	187855	1049	450
2	2011	0.00	0.02	0.22	188460	2208	775
3	2012	0.00	0.04	0.25	185586	3512	1116
4	2013	0.01	0.05	0.13	181316	5627	1161
5	2014	0.00	0.00	0.10	180843	5798	1308
6	2015	0.00	0.01	0.06	173657	7732	1263
7	2016	0.00	0.03	0.07	170212	13072	1512
8	2017	0.00	0.00	0.08	148138	20310	1738
9	2018	0.00	0.00	0.02	129721	27800	1662
10	2019	0.00	0.00	0.01	122536	31531	1832
11	2020	0.00	0.00	0.00	117139	36088	1687
12	2021	0.00	-0.01	0.00	93113	29995	1142
13	2022	0.00	0.00	0.00	74526	28724	1170
14	2023	0.00	0.00	0.00	74158	29912	1231
15	2024	0.00	0.00	0.00	20012	5351	256



RDC datacut EBV (me) and official EBV (e) for nongenotyped females with phenotype

Obs	BYR	name	no	mean_me	mean_e	std_me	std_e	mean_dif	std_dif	corr
1	2000	dSB1	36278	95.8	96.9	6.5	6.0	-1.1	4.2	0.77
2	2001	dSB1	37799	95.5	96.2	6.3	5.9	-0.8	3.5	0.84
3	2002	dSB1	35050	96.2	97.1	6.8	6.1	-0.9	2.9	0.91
4	2003	dSB1	30237	94.9	96.0	6.3	6.0	-1.1	2.5	0.92
5	2004	dSB1	36066	95.6	96.4	6.2	6.1	-0.8	2.2	0.94
6	2005	dSB1	34124	95.6	96.2	6.1	5.9	-0.7	2.0	0.95
7	2006	dSB1	32937	94.9	95.6	6.7	6.5	-0.7	1.7	0.97
8	2007	dSB1	31460	95.3	95.8	7.7	7.6	-0.5	1.6	0.98
9	2008	dSB1	31050	95.3	95.8	6.4	6.3	-0.5	1.3	0.98
10	2009	dSB1	30060	96.1	96.5	6.8	6.6	-0.4	1.2	0.98
11	2010	dSB1	28912	96.1	96.4	6.4	6.3	-0.3	1.1	0.99
12	2011	dSB1	27938	96.8	97.1	5.9	5.9	-0.3	0.9	0.99
13	2012	dSB1	25957	96.7	97.0	6.0	6.0	-0.3	0.8	0.99
14	2013	dSB1	25507	97.1	97.3	5.6	5.6	-0.2	0.7	0.99
15	2014	dSB1	23714	97.4	97.5	5.6	5.6	-0.2	0.7	0.99
16	2015	dSB1	21585	98.4	98.5	5.7	5.7	-0.1	0.7	0.99
17	2016	dSB1	18680	98.4	98.4	5.6	5.5	0.0	0.7	0.99
18	2017	dSB1	15483	98.7	98.8	5.4	5.4	0.0	0.6	0.99
19	2018	dSB1	13191	99.3	99.3	5.3	5.3	0.0	0.7	0.99
20	2019	dSB1	11482	99.2	99.2	5.6	5.5	0.0	0.7	0.99
21	2020	dSB1	9873	99.8	99.8	5.3	5.3	0.0	0.7	0.99
22	2021	dSB1	8383	99.1	99.0	5.3	5.3	0.0	0.7	0.99
23	2022	dSB1	7888	99.3	99.2	5.6	5.5	0.1	0.8	0.99
24	2023	dSB1	6766	99.5	99.4	4.4	4.3	0.1	1.0	0.97
25	2024	dSB1	1567	100.1	100.0	4.1	4.1	0.1	0.8	0.98
26	2000	dCE1	8801	89.0	90.4	7.9	8.7	-1.3	3.3	0.93
27	2001	dCE1	8387	89.4	90.7	8.1	8.7	-1.3	2.6	0.95
28	2002	dCE1	7927	89.2	90.2	7.3	7.7	-1.1	2.0	0.96
29	2003	dCE1	8102	91.1	92.0	7.2	7.4	-0.9	1.7	0.97
30	2004	dCE1	20361	98.0	98.4	7.7	7.6	-0.5	1.2	0.99
31	2005	dCE1	19301	98.0	98.4	7.8	7.7	-0.4	1.1	0.99
32	2006	dCE1	18582	97.5	97.8	8.2	8.2	-0.3	1.0	0.99
33	2007	dCE1	21177	98.3	98.5	7.8	7.7	-0.2	0.8	0.99
34	2008	dCE1	22305	97.5	97.6	7.3	7.3	-0.1	0.7	0.99
35	2009	dCE1	22196	98.2	98.3	7.7	7.7	-0.1	0.7	1.00
36	2010	dCE1	21032	97.9	98.0	7.1	7.0	-0.1	0.6	1.00
37	2011	dCE1	20343	98.5	98.6	6.5	6.5	0.0	0.6	1.00

RDC datacut EBV (me) and official EBV (e) for nongenotyped females with phenotype

Obs	BYR	name	no	mean_me	mean_e	std_me	std_e	mean_dif	std_dif	corr
38	2012	dCE1	18741	98.6	98.7	6.5	6.5	0.0	0.5	1.00
39	2013	dCE1	17902	98.5	98.5	6.6	6.5	0.0	0.5	1.00
40	2014	dCE1	16702	98.8	98.8	6.5	6.4	0.0	0.5	1.00
41	2015	dCE1	14939	99.2	99.2	6.4	6.4	0.1	0.5	1.00
42	2016	dCE1	13419	98.5	98.4	6.3	6.3	0.1	0.5	1.00
43	2017	dCE1	11257	98.5	98.4	6.2	6.1	0.1	0.5	1.00
44	2018	dCE1	9469	99.2	99.1	6.2	6.1	0.1	0.5	1.00
45	2019	dCE1	8367	99.9	99.9	5.6	5.5	0.0	0.6	0.99
46	2020	dCE1	6995	99.4	99.4	6.2	6.1	0.0	0.5	1.00
47	2021	dCE1	6096	100.1	100.1	5.5	5.5	0.0	0.5	1.00
48	2022	dCE1	5911	99.0	99.0	5.8	5.7	0.0	0.6	0.99
49	2023	dCE1	5015	99.7	99.7	4.7	4.7	0.0	0.6	0.99
50	2024	dCE1	1153	100.5	100.5	4.5	4.5	0.0	0.7	0.99
51	2000	dCS1	8492	109.8	109.5	9.6	9.8	0.3	2.5	0.97
52	2001	dCS1	7901	109.1	108.7	9.7	9.8	0.5	2.4	0.97
53	2002	dCS1	7356	108.8	108.5	9.5	9.6	0.3	1.7	0.98
54	2003	dCS1	7490	108.0	107.8	8.8	8.7	0.2	1.4	0.99
55	2004	dCS1	6973	106.8	106.6	8.6	8.5	0.2	1.2	0.99
56	2005	dCS1	6484	108.0	107.9	8.9	8.8	0.2	1.1	0.99
57	2006	dCS1	6376	106.6	106.5	9.2	9.2	0.1	1.0	0.99
58	2007	dCS1	5930	106.2	106.1	8.7	8.6	0.0	0.8	1.00
59	2008	dCS1	6634	106.6	106.6	8.1	8.1	0.0	0.7	1.00
60	2009	dCS1	7054	106.9	106.9	8.2	8.1	0.0	0.7	1.00
61	2010	dCS1	6661	105.7	105.7	7.9	7.8	0.0	0.6	1.00
62	2011	dCS1	6576	103.9	103.9	8.1	8.0	0.0	0.6	1.00
63	2012	dCS1	5972	103.8	103.8	8.5	8.4	0.0	0.6	1.00
64	2013	dCS1	5604	101.7	101.8	8.5	8.4	0.0	0.5	1.00
65	2014	dCS1	5230	101.9	102.0	8.7	8.6	0.0	0.5	1.00
66	2015	dCS1	4964	100.6	100.7	8.2	8.1	0.0	0.5	1.00
67	2016	dCS1	4794	101.9	102.0	8.6	8.5	0.0	0.5	1.00
68	2017	dCS1	3743	100.7	100.7	8.4	8.3	0.0	0.5	1.00
69	2018	dCS1	3322	100.3	100.3	8.0	7.9	0.0	0.6	1.00
70	2019	dCS1	3021	99.5	99.5	8.1	8.0	0.0	0.6	1.00
71	2020	dCS1	2379	99.6	99.6	8.2	8.1	0.0	0.7	1.00
72	2021	dCS1	2358	100.3	100.3	7.8	7.7	0.0	0.6	1.00
73	2022	dCS1	2751	101.0	101.0	7.5	7.4	0.0	0.6	1.00
74	2023	dCS1	2473	101.2	101.2	6.8	6.7	0.1	0.6	1.00

RDC datacut EBV (me) and official EBV (e) for nongenotyped females with phenotype

Obs	BYR	name	no	mean_me	mean_e	std_me	std_e	mean_dif	std_dif	corr
75	2024	dCS1	575	99.7	99.7	6.5	6.5	0.0	0.8	0.99
76	2000	dSB2	60982	96.5	96.5	6.7	6.5	0.1	5.1	0.70
77	2001	dSB2	63474	96.9	97.0	6.3	6.5	-0.1	4.0	0.80
78	2002	dSB2	59116	96.0	96.1	7.0	7.3	-0.1	3.7	0.86
79	2003	dSB2	47728	95.8	96.0	5.9	6.4	-0.2	3.6	0.83
80	2004	dSB2	57386	95.7	95.5	6.0	6.6	0.2	3.1	0.88
81	2005	dSB2	55278	96.0	95.7	6.7	7.0	0.3	2.8	0.92
82	2006	dSB2	53768	96.1	95.9	6.5	6.7	0.2	2.4	0.94
83	2007	dSB2	51214	95.8	95.6	8.5	8.6	0.3	2.1	0.97
84	2008	dSB2	49727	95.8	95.5	6.6	6.6	0.3	1.9	0.96
85	2009	dSB2	50029	96.8	96.6	6.4	6.3	0.2	1.7	0.96
86	2010	dSB2	47305	95.7	95.4	6.3	6.4	0.3	1.5	0.97
87	2011	dSB2	44581	96.3	96.0	6.2	6.2	0.2	1.3	0.98
88	2012	dSB2	41452	96.6	96.4	6.1	6.1	0.2	1.2	0.98
89	2013	dSB2	40304	97.1	96.9	6.1	6.1	0.2	1.0	0.99
90	2014	dSB2	38000	97.4	97.2	6.0	6.0	0.2	0.9	0.99
91	2015	dSB2	34349	97.8	97.6	5.8	5.8	0.2	0.9	0.99
92	2016	dSB2	29883	98.1	97.9	5.5	5.4	0.2	0.8	0.99
93	2017	dSB2	24541	98.3	98.1	5.5	5.5	0.3	0.8	0.99
94	2018	dSB2	21151	98.4	98.3	5.5	5.5	0.1	0.7	0.99
95	2019	dSB2	18223	98.3	98.2	5.1	5.1	0.1	0.8	0.99
96	2020	dSB2	15836	98.9	98.9	5.1	5.1	0.0	0.8	0.99
97	2021	dSB2	14194	98.9	98.9	4.6	4.6	0.0	0.8	0.98
98	2022	dSB2	11579	99.0	98.9	4.8	4.7	0.1	0.9	0.98
99	2023	dSB2	10290	99.5	99.5	4.3	4.2	0.0	0.9	0.98
100	2024	dSB2	2216	99.1	99.1	4.5	4.4	0.0	0.8	0.99
101	2000	dCE2	12786	84.8	88.3	8.9	9.8	-3.5	3.4	0.94
102	2001	dCE2	12295	88.9	92.1	6.9	7.7	-3.2	3.1	0.92
103	2002	dCE2	11521	89.1	92.2	6.4	7.1	-3.0	2.8	0.92
104	2003	dCE2	11763	90.1	92.6	7.1	7.6	-2.6	2.5	0.94
105	2004	dCE2	18089	94.1	95.4	8.0	7.7	-1.2	2.2	0.96
106	2005	dCE2	17318	94.3	95.3	8.0	7.7	-1.0	1.9	0.97
107	2006	dCE2	17833	94.7	95.4	7.7	7.6	-0.8	1.6	0.98
108	2007	dCE2	26090	96.4	96.8	8.6	8.4	-0.4	1.4	0.99
109	2008	dCE2	28752	94.9	95.1	8.5	8.4	-0.3	1.2	0.99
110	2009	dCE2	30200	97.1	97.4	8.1	8.0	-0.2	1.1	0.99
111	2010	dCE2	28782	96.9	97.1	7.5	7.4	-0.1	1.0	0.99

RDC datacut EBV (me) and official EBV (e) for nongenotyped females with phenotype

Obs	BYR	name	no	mean_me	mean_e	std_me	std_e	mean_dif	std_dif	corr
112	2011	dCE2	27478	97.2	97.3	6.9	6.8	-0.1	0.9	0.99
113	2012	dCE2	26282	97.1	97.2	7.1	7.1	-0.1	0.8	0.99
114	2013	dCE2	25539	97.6	97.6	7.3	7.3	0.0	0.7	1.00
115	2014	dCE2	24510	98.0	98.0	6.7	6.7	0.0	0.7	0.99
116	2015	dCE2	22232	98.1	98.1	6.8	6.7	0.0	0.7	1.00
117	2016	dCE2	19987	97.8	97.8	6.6	6.6	0.0	0.8	0.99
118	2017	dCE2	16663	98.5	98.4	6.0	6.0	0.1	0.8	0.99
119	2018	dCE2	14505	98.3	98.3	6.0	6.0	0.0	0.7	0.99
120	2019	dCE2	12695	98.8	98.8	5.7	5.7	0.0	0.8	0.99
121	2020	dCE2	10981	98.9	98.9	6.3	6.3	0.0	0.9	0.99
122	2021	dCE2	9991	99.4	99.4	5.5	5.5	0.0	0.9	0.99
123	2022	dCE2	8203	99.0	99.0	5.3	5.3	0.0	0.9	0.99
124	2023	dCE2	7170	99.4	99.5	4.7	4.7	-0.1	1.0	0.98
125	2024	dCE2	1617	100.3	100.3	4.6	4.5	-0.1	0.9	0.98
126	2000	dCS2	12420	118.4	116.7	12.6	12.5	1.7	2.9	0.97
127	2001	dCS2	11739	113.6	112.4	9.7	10.1	1.2	2.7	0.96
128	2002	dCS2	10858	113.2	112.2	9.7	10.0	1.0	2.5	0.97
129	2003	dCS2	10882	112.8	112.0	9.8	9.9	0.8	2.2	0.97
130	2004	dCS2	10460	112.3	111.6	10.0	10.0	0.7	1.8	0.98
131	2005	dCS2	9706	111.6	111.0	10.0	10.0	0.6	1.5	0.99
132	2006	dCS2	9270	110.0	109.5	10.1	10.1	0.5	1.2	0.99
133	2007	dCS2	8815	110.3	109.8	9.9	9.8	0.5	1.0	0.99
134	2008	dCS2	9580	111.3	110.9	9.7	9.6	0.4	0.9	1.00
135	2009	dCS2	9827	110.1	109.7	9.3	9.2	0.4	0.8	1.00
136	2010	dCS2	9085	109.2	108.9	8.7	8.6	0.3	0.7	1.00
137	2011	dCS2	8811	106.9	106.7	8.9	8.8	0.2	0.6	1.00
138	2012	dCS2	8362	107.1	106.9	9.4	9.3	0.2	0.6	1.00
139	2013	dCS2	7804	105.7	105.5	9.5	9.3	0.1	0.5	1.00
140	2014	dCS2	7437	104.5	104.4	9.1	9.0	0.1	0.5	1.00
141	2015	dCS2	6407	104.9	104.9	9.2	9.1	0.1	0.5	1.00
142	2016	dCS2	5659	104.1	104.0	8.9	8.8	0.1	0.5	1.00
143	2017	dCS2	4544	102.6	102.6	9.0	8.9	0.0	0.5	1.00
144	2018	dCS2	4254	102.1	102.1	9.0	8.9	0.0	0.5	1.00
145	2019	dCS2	3844	102.4	102.4	9.1	9.0	0.0	0.5	1.00
146	2020	dCS2	3140	100.9	100.9	8.5	8.4	0.0	0.4	1.00
147	2021	dCS2	3262	101.2	101.2	8.0	7.9	0.0	0.5	1.00
148	2022	dCS2	2754	101.5	101.6	8.2	8.1	0.0	0.5	1.00

RDC datacut EBV (me) and official EBV (e) for nongenotyped females with phenotype

Obs	BYR	name	no	mean_me	mean_e	std_me	std_e	mean_dif	std_dif	corr
149	2023	dCS2	2499	100.1	100.1	7.4	7.3	0.0	0.6	1.00
150	2024	dCS2	545	99.2	99.3	8.4	8.3	-0.1	0.5	1.00
151	2000	mSB1	66925	88.3	87.5	7.5	7.0	0.9	3.3	0.90
152	2001	mSB1	68334	88.6	88.1	7.1	6.4	0.5	3.0	0.91
153	2002	mSB1	72120	88.6	88.1	7.1	6.6	0.5	2.5	0.93
154	2003	mSB1	69540	88.9	88.5	7.4	6.8	0.4	2.3	0.95
155	2004	mSB1	67093	89.1	88.7	7.1	6.5	0.4	2.1	0.96
156	2005	mSB1	62914	90.2	89.8	7.0	6.6	0.4	1.9	0.96
157	2006	mSB1	61541	91.5	91.1	6.7	6.2	0.3	1.7	0.97
158	2007	mSB1	58997	91.8	91.5	7.0	6.5	0.3	1.6	0.98
159	2008	mSB1	57121	92.6	92.4	6.6	6.1	0.2	1.4	0.98
160	2009	mSB1	55329	93.2	93.1	6.1	5.7	0.2	1.3	0.98
161	2010	mSB1	50322	93.2	93.1	7.0	6.5	0.1	1.2	0.99
162	2011	mSB1	48844	94.6	94.5	6.4	6.0	0.1	1.0	0.99
163	2012	mSB1	44486	95.6	95.5	6.3	5.9	0.1	1.0	0.99
164	2013	mSB1	41898	96.1	96.0	5.7	5.4	0.1	0.9	0.99
165	2014	mSB1	37974	95.8	95.8	5.8	5.5	0.1	1.0	0.99
166	2015	mSB1	32671	97.4	97.2	5.5	5.3	0.1	0.9	0.99
167	2016	mSB1	27490	98.0	97.8	5.7	5.4	0.2	1.0	0.98
168	2017	mSB1	22158	97.4	97.4	5.8	5.7	0.1	1.1	0.98
169	2018	mSB1	18417	98.2	98.1	5.7	5.5	0.1	1.0	0.98
170	2019	mSB1	15348	98.1	98.1	5.3	5.2	0.0	1.2	0.97
171	2020	mSB1	13706	99.3	99.3	5.3	5.3	0.1	1.1	0.98
172	2021	mSB1	10497	99.2	99.2	5.7	5.6	0.0	1.1	0.98
173	2022	mSB1	1312	99.3	99.4	5.5	5.2	-0.1	0.8	0.99
174	2000	mCE1	16305	90.5	88.7	7.2	7.7	1.8	2.8	0.93
175	2001	mCE1	19639	88.5	87.2	8.0	7.8	1.3	2.6	0.95
176	2002	mCE1	39656	84.1	84.1	8.5	7.8	0.1	2.1	0.97
177	2003	mCE1	38843	84.7	84.6	9.0	8.4	0.0	1.8	0.98
178	2004	mCE1	38498	85.5	85.4	8.4	7.8	0.1	1.6	0.98
179	2005	mCE1	42871	85.6	85.6	8.1	7.7	0.0	1.4	0.99
180	2006	mCE1	44218	86.6	86.6	8.0	7.7	0.0	1.2	0.99
181	2007	mCE1	42741	88.0	88.0	8.4	8.1	0.0	1.1	0.99
182	2008	mCE1	41396	88.5	88.5	7.9	7.6	0.0	1.0	0.99
183	2009	mCE1	40305	89.3	89.2	7.5	7.2	0.1	1.0	0.99
184	2010	mCE1	36013	89.8	89.8	7.7	7.5	0.0	0.9	0.99
185	2011	mCE1	33767	91.4	91.3	7.2	7.0	0.1	0.8	0.99

RDC datacut EBV (me) and official EBV (e) for nongenotyped females with phenotype

Obs	BYR	name	no	mean_me	mean_e	std_me	std_e	mean_dif	std_dif	corr
186	2012	mCE1	30998	93.0	92.9	7.2	7.0	0.1	0.8	0.99
187	2013	mCE1	29006	93.2	93.1	6.7	6.6	0.0	0.7	0.99
188	2014	mCE1	27386	94.2	94.1	6.8	6.7	0.1	0.7	0.99
189	2015	mCE1	24069	95.2	95.2	6.8	6.7	0.1	0.8	0.99
190	2016	mCE1	20212	97.1	97.0	6.6	6.5	0.1	0.8	0.99
191	2017	mCE1	15957	95.8	95.8	6.1	6.1	0.0	0.9	0.99
192	2018	mCE1	12958	97.6	97.5	6.8	6.8	0.0	0.9	0.99
193	2019	mCE1	10919	97.6	97.6	6.2	6.2	0.0	0.9	0.99
194	2020	mCE1	9776	98.6	98.5	6.2	6.2	0.1	0.9	0.99
195	2021	mCE1	7462	98.8	98.8	5.9	6.0	0.0	0.9	0.99
196	2022	mCE1	959	99.3	99.3	5.2	5.1	0.0	0.6	0.99
197	2000	mCS1	15238	101.9	103.3	13.3	13.4	-1.5	3.4	0.97
198	2001	mCS1	14663	104.0	105.4	12.9	13.1	-1.5	3.0	0.97
199	2002	mCS1	13523	101.0	102.2	10.6	10.7	-1.2	2.6	0.97
200	2003	mCS1	12921	102.2	103.4	10.1	10.1	-1.2	2.2	0.98
201	2004	mCS1	12661	102.5	103.4	10.2	10.3	-1.0	2.0	0.98
202	2005	mCS1	11885	102.1	103.2	10.1	10.0	-1.0	1.7	0.99
203	2006	mCS1	12844	103.5	104.3	10.1	10.0	-0.8	1.5	0.99
204	2007	mCS1	12541	99.7	100.6	10.3	10.2	-0.9	1.3	0.99
205	2008	mCS1	12424	102.2	103.0	10.8	10.6	-0.8	1.2	0.99
206	2009	mCS1	12494	103.3	104.0	10.7	10.5	-0.7	1.1	0.99
207	2010	mCS1	11021	100.9	101.6	9.5	9.4	-0.7	1.0	0.99
208	2011	mCS1	10657	102.5	103.1	9.1	9.0	-0.6	0.9	1.00
209	2012	mCS1	9924	101.5	102.0	9.6	9.4	-0.5	0.9	1.00
210	2013	mCS1	9120	101.0	101.5	9.5	9.3	-0.5	0.8	1.00
211	2014	mCS1	8669	100.4	100.9	8.4	8.2	-0.5	0.8	1.00
212	2015	mCS1	7435	101.1	101.6	9.5	9.2	-0.5	0.8	1.00
213	2016	mCS1	6645	98.4	98.9	8.6	8.4	-0.5	0.8	1.00
214	2017	mCS1	5127	100.2	100.7	8.7	8.6	-0.5	1.0	0.99
215	2018	mCS1	4066	99.7	100.2	9.8	9.6	-0.5	0.9	1.00
216	2019	mCS1	3500	100.4	100.9	8.6	8.5	-0.5	1.1	0.99
217	2020	mCS1	3539	99.9	100.4	7.7	7.6	-0.5	1.0	0.99
218	2021	mCS1	2914	102.6	103.0	7.6	7.5	-0.5	1.0	0.99
219	2022	mCS1	385	98.5	99.1	8.3	8.2	-0.6	0.8	1.00
220	2000	mSB2	54617	95.9	93.3	7.4	6.5	2.7	3.2	0.90
221	2001	mSB2	58863	95.6	93.3	7.0	6.3	2.3	2.7	0.92
222	2002	mSB2	56000	95.4	93.0	7.2	6.6	2.4	2.4	0.94

RDC datacut EBV (me) and official EBV (e) for nongenotyped females with phenotype

Obs	BYR	name	no	mean_me	mean_e	std_me	std_e	mean_dif	std_dif	corr
223	2003	mSB2	53785	95.1	92.9	7.9	7.4	2.2	2.2	0.96
224	2004	mSB2	51700	95.9	93.9	7.6	7.2	2.0	2.0	0.97
225	2005	mSB2	49453	96.0	94.2	7.7	7.2	1.9	1.8	0.97
226	2006	mSB2	49040	96.9	95.2	7.3	7.0	1.7	1.6	0.98
227	2007	mSB2	46612	96.7	95.3	7.8	7.5	1.5	1.5	0.98
228	2008	mSB2	44515	97.4	96.0	7.6	7.3	1.4	1.3	0.99
229	2009	mSB2	43351	97.1	95.8	7.2	6.8	1.3	1.2	0.99
230	2010	mSB2	38827	97.6	96.5	7.2	6.9	1.1	1.1	0.99
231	2011	mSB2	37153	98.5	97.5	6.6	6.4	1.0	1.1	0.99
232	2012	mSB2	33423	99.6	98.7	6.3	6.0	0.9	1.0	0.99
233	2013	mSB2	30088	100.1	99.4	5.8	5.6	0.7	0.9	0.99
234	2014	mSB2	26894	99.8	99.1	6.1	5.9	0.7	0.9	0.99
235	2015	mSB2	23314	100.7	100.2	5.9	5.8	0.6	0.9	0.99
236	2016	mSB2	19594	100.7	100.2	5.7	5.6	0.5	0.9	0.99
237	2017	mSB2	15846	100.3	100.1	5.8	5.8	0.3	1.0	0.99
238	2018	mSB2	13154	100.3	100.1	5.6	5.6	0.2	0.9	0.99
239	2019	mSB2	10191	100.3	100.1	5.3	5.3	0.1	1.0	0.98
240	2020	mSB2	7570	100.4	100.6	5.3	5.3	-0.1	0.9	0.98
241	2021	mSB2	825	100.1	100.2	5.3	5.1	-0.1	0.9	0.99
242	2022	mSB2	1	.	.	.	.	.	.	.
243	2000	mCE2	18460	89.8	87.8	9.2	8.1	2.0	3.0	0.95
244	2001	mCE2	23539	88.0	86.7	8.7	7.7	1.2	2.6	0.96
245	2002	mCE2	24810	86.9	86.0	8.9	7.9	1.0	2.3	0.97
246	2003	mCE2	28805	86.0	85.4	9.9	9.0	0.6	2.0	0.98
247	2004	mCE2	32521	87.2	86.7	9.2	8.5	0.5	1.8	0.98
248	2005	mCE2	32217	87.9	87.5	8.2	7.7	0.4	1.5	0.98
249	2006	mCE2	32817	88.4	88.0	8.3	7.8	0.4	1.3	0.99
250	2007	mCE2	31595	89.6	89.3	8.5	8.0	0.3	1.3	0.99
251	2008	mCE2	30568	90.4	90.1	8.2	7.8	0.3	1.1	0.99
252	2009	mCE2	30241	90.7	90.4	8.6	8.1	0.3	1.1	0.99
253	2010	mCE2	26938	91.9	91.6	8.0	7.7	0.3	1.0	0.99
254	2011	mCE2	26224	93.1	92.8	7.1	6.8	0.3	0.9	0.99
255	2012	mCE2	24156	94.7	94.4	7.0	6.7	0.3	0.9	0.99
256	2013	mCE2	22543	94.9	94.7	6.7	6.4	0.2	0.8	0.99
257	2014	mCE2	20336	95.6	95.4	6.6	6.4	0.3	0.9	0.99
258	2015	mCE2	17687	97.1	96.8	6.4	6.2	0.3	0.8	0.99
259	2016	mCE2	14876	97.7	97.5	6.0	5.9	0.2	0.9	0.99

RDC datacut EBV (me) and official EBV (e) for nongenotyped females with phenotype

Obs	BYR	name	no	mean_me	mean_e	std_me	std_e	mean_dif	std_dif	corr
260	2017	mCE2	11659	97.4	97.3	5.8	5.7	0.1	1.1	0.98
261	2018	mCE2	9564	98.9	98.8	6.2	6.2	0.1	1.0	0.99
262	2019	mCE2	7352	98.5	98.5	5.6	5.6	0.0	1.1	0.98
263	2020	mCE2	5327	99.5	99.5	5.2	5.2	0.0	0.9	0.99
264	2021	mCE2	579	99.9	99.9	4.3	4.2	0.1	0.9	0.98
265	2022	mCE2	1	.	.	.	.	.	.	.
266	2000	mCS2	11611	112.8	112.3	12.8	12.4	0.5	2.9	0.97
267	2001	mCS2	10980	113.8	113.2	13.0	12.7	0.6	2.5	0.98
268	2002	mCS2	10194	109.9	109.4	10.0	9.8	0.6	2.2	0.98
269	2003	mCS2	10039	109.7	109.0	10.1	10.0	0.7	1.9	0.98
270	2004	mCS2	10066	110.4	109.7	9.4	9.3	0.7	1.6	0.98
271	2005	mCS2	9976	108.4	107.7	9.6	9.4	0.7	1.4	0.99
272	2006	mCS2	10011	110.1	109.5	9.7	9.6	0.6	1.2	0.99
273	2007	mCS2	9594	106.0	105.5	9.7	9.5	0.5	1.1	0.99
274	2008	mCS2	9492	107.0	106.5	9.3	9.2	0.5	1.0	0.99
275	2009	mCS2	9460	107.4	106.9	9.1	9.0	0.4	0.9	1.00
276	2010	mCS2	8122	104.3	104.0	8.3	8.2	0.4	0.8	1.00
277	2011	mCS2	7876	104.4	104.0	8.6	8.4	0.4	0.7	1.00
278	2012	mCS2	7018	102.9	102.6	9.0	8.8	0.3	0.7	1.00
279	2013	mCS2	6325	103.6	103.3	7.8	7.6	0.3	0.6	1.00
280	2014	mCS2	5747	102.8	102.6	7.4	7.3	0.2	0.6	1.00
281	2015	mCS2	5341	102.5	102.4	8.1	7.9	0.1	0.6	1.00
282	2016	mCS2	4578	100.8	100.7	7.9	7.8	0.1	0.6	1.00
283	2017	mCS2	3410	100.6	100.6	8.1	8.1	0.0	0.8	1.00
284	2018	mCS2	2868	100.7	100.7	8.6	8.5	0.0	0.8	1.00
285	2019	mCS2	2237	102.0	102.1	7.6	7.5	-0.1	0.9	0.99
286	2020	mCS2	1788	101.6	101.7	6.6	6.6	-0.1	0.8	0.99
287	2021	mCS2	217	104.9	105.1	8.0	8.1	-0.1	0.9	0.99
288	2022	mCS2	1	.	.	.	.	.	.	.
289	2000	brth	36278	96.2	96.7	6.4	6.0	-0.5	4.2	0.77
290	2001	brth	37799	95.9	96.3	6.4	5.9	-0.4	3.4	0.85
291	2002	brth	35050	96.7	97.1	6.9	6.2	-0.4	2.9	0.91
292	2003	brth	30237	95.8	96.6	6.1	5.8	-0.8	2.5	0.91
293	2004	brth	36066	96.0	96.6	6.1	6.0	-0.5	2.2	0.93
294	2005	brth	34124	96.1	96.6	6.3	6.0	-0.5	2.0	0.95
295	2006	brth	32937	95.7	96.2	6.4	6.2	-0.4	1.7	0.96
296	2007	brth	31460	95.8	96.1	8.1	7.9	-0.3	1.6	0.98

RDC datacut EBV (me) and official EBV (e) for nongenotyped females with phenotype

Obs	BYR	name	no	mean_me	mean_e	std_me	std_e	mean_dif	std_dif	corr
297	2008	brth	31050	95.7	95.9	6.6	6.4	-0.2	1.4	0.98
298	2009	brth	30060	96.4	96.6	6.9	6.7	-0.2	1.2	0.98
299	2010	brth	28912	96.1	96.2	6.3	6.2	-0.1	1.1	0.98
300	2011	brth	27938	96.9	97.0	6.1	5.9	-0.1	1.0	0.99
301	2012	brth	25957	96.7	96.8	6.2	6.0	-0.1	0.9	0.99
302	2013	brth	25507	97.1	97.2	5.9	5.8	0.0	0.8	0.99
303	2014	brth	23714	97.4	97.4	5.8	5.7	0.0	0.7	0.99
304	2015	brth	21585	98.4	98.3	5.8	5.7	0.0	0.7	0.99
305	2016	brth	18680	98.4	98.3	5.6	5.5	0.1	0.7	0.99
306	2017	brth	15483	98.7	98.5	5.4	5.4	0.2	0.7	0.99
307	2018	brth	13191	99.2	99.1	5.4	5.3	0.1	0.7	0.99
308	2019	brth	11482	99.2	99.1	5.3	5.2	0.0	0.8	0.99
309	2020	brth	9873	99.6	99.6	5.4	5.3	0.0	0.7	0.99
310	2021	brth	8383	99.1	99.1	5.0	5.0	0.0	0.7	0.99
311	2022	brth	7888	99.2	99.1	5.3	5.2	0.0	0.9	0.99
312	2023	brth	6766	99.5	99.5	4.3	4.2	0.0	1.1	0.97
313	2024	brth	1567	100.0	99.9	4.2	4.1	0.0	0.8	0.98
314	2000	calv	66925	89.7	87.5	7.5	6.6	2.3	3.3	0.90
315	2001	calv	68334	89.9	88.0	7.3	6.4	1.9	2.9	0.92
316	2002	calv	72120	89.6	87.7	7.2	6.6	1.9	2.5	0.94
317	2003	calv	69540	89.6	87.9	7.9	7.3	1.7	2.3	0.96
318	2004	calv	67093	90.3	88.7	7.6	7.0	1.6	2.0	0.96
319	2005	calv	62914	91.0	89.5	7.4	6.8	1.5	1.9	0.97
320	2006	calv	61541	92.2	90.8	7.1	6.6	1.4	1.7	0.97
321	2007	calv	58997	92.5	91.3	7.6	7.0	1.2	1.6	0.98
322	2008	calv	57121	93.3	92.2	7.2	6.7	1.1	1.5	0.98
323	2009	calv	55329	93.6	92.6	6.7	6.2	1.0	1.4	0.98
324	2010	calv	50322	93.9	93.1	7.2	6.7	0.9	1.3	0.99
325	2011	calv	48844	95.3	94.5	6.6	6.2	0.8	1.1	0.99
326	2012	calv	44486	96.6	95.8	6.4	6.0	0.8	1.0	0.99
327	2013	calv	41898	97.1	96.4	5.7	5.5	0.7	1.0	0.99
328	2014	calv	37974	96.9	96.3	5.8	5.6	0.6	1.0	0.99
329	2015	calv	32671	98.3	97.8	5.7	5.5	0.5	0.9	0.99
330	2016	calv	27490	98.8	98.4	5.6	5.4	0.5	1.0	0.98
331	2017	calv	22158	98.3	98.0	5.6	5.5	0.3	1.1	0.98
332	2018	calv	18417	98.8	98.7	5.5	5.4	0.1	1.0	0.98
333	2019	calv	15348	98.7	98.6	5.2	5.2	0.1	1.1	0.98

RDC datacut EBV (me) and official EBV (e) for nongenotyped females with phenotype

Obs	BYR	name	no	mean_me	mean_e	std_me	std_e	mean_dif	std_dif	corr
334	2020	calv	13706	99.5	99.5	5.1	5.2	0.0	1.1	0.98
335	2021	calv	10497	99.4	99.5	5.3	5.3	0.0	1.1	0.98
336	2022	calv	1312	99.9	100.0	5.3	5.2	-0.1	0.8	0.99

RDC datacut EBV (me) and official EBV (e) for nongenotyped females with phenotype

Obs	diff	d_brth	d_calv	p_brth	p_calv
1	-56	1	.	0	.
2	-54	.	.	.	.
3	-43	1	.	0	.
4	-41	.	.	.	.
5	-40	.	.	.	.
6	-39	1	.	0	.
7	-37	.	.	.	.
8	-34	1	.	0	.
9	-33	.	.	.	.
10	-32	.	1	.	0
11	-31	.	1	.	0
12	-30	.	.	.	.
13	-29	.	.	.	.
14	-28	1	1	0	0
15	-27	1	.	0	.
16	-26	3	.	0	.
17	-25	2	.	0	.
18	-24	2	1	0	0
19	-23	1	1	0	0
20	-22	.	.	.	.
21	-21	5	.	0	.
22	-20	3	.	0	.
23	-19	3	3	0	0
24	-18	3	1	0	0
25	-17	17	2	0	0
26	-16	31	3	0	0
27	-15	57	3	0	0
28	-14	106	7	0	0
29	-13	142	4	0	0
30	-12	290	4	0	0
31	-11	508	13	0	0
32	-10	796	16	0	0
33	-9	1285	35	0	0
34	-8	2074	53	0	0
35	-7	3272	151	1	0
36	-6	5131	408	1	0
37	-5	8508	1030	1	0

RDC datacut EBV (me) and official EBV (e) for nongenotyped females with phenotype

Obs	diff	d_brth	d_calv	p_brth	p_calv
38	-4	13441	2522	2	0
39	-3	21418	7004	4	1
40	-2	37947	22987	7	2
41	-1	93327	95895	16	10
42	0	219408	272120	38	27
43	1	115732	268368	20	27
44	2	32158	138326	6	14
45	3	13164	79350	2	8
46	4	6317	49804	1	5
47	5	3257	29435	1	3
48	6	1640	16825	0	2
49	7	883	9547	0	1
50	8	462	5200	0	1
51	9	234	2575	0	0
52	10	144	1459	0	0
53	11	79	737	0	0
54	12	32	428	0	0
55	13	25	263	0	0
56	14	12	148	0	0
57	15	21	77	0	0
58	16	15	69	0	0
59	17	3	39	0	0
60	18	5	24	0	0
61	19	5	22	0	0
62	20	1	19	0	0
63	21	1	12	0	0
64	22	.	12	.	0
65	23	1	9	0	0
66	24	3	7	0	0
67	25	2	.	0	.
68	26	2	1	0	0
69	27	.	2	.	0
70	28	2	4	0	0
71	29	.	1	.	0
72	30	1	1	0	0
73	31	.	2	.	0
74	32	.	1	.	0

RDC datacut EBV (me) and official EBV (e) for nongenotyped females with phenotype

Obs	diff	d_brth	d_calv	p_brth	p_calv
75	33	.	2	.	0
76	34	.	1	.	0
77	35	.	1	.	0
78	37	.	.	.	.

RDC datacut EBV (me) and official EBV (e) for nongenotyped females with phenotype

Obs	diff	d_dSB1	d_dCE1	d_dCS1	d_dSB2	d_dCE2	d_dCS2
1	-56	.	.	.	.	.	.
2	-54	1	.	.	.	.	.
3	-43	.	.	.	.	.	.
4	-41	.	.	.	2	.	.
5	-40	1	.	.	2	.	.
6	-39	.	.	.	.	.	.
7	-37	1	.	.	.	.	.
8	-34	.	.	.	.	.	.
9	-33	.	.	.	1	.	.
10	-32	1	.	.	.	.	.
11	-31	.	.	.	.	.	.
12	-30	.	.	.	1	.	.
13	-29	.	.	.	1	.	.
14	-28	.	.	.	1	1	.
15	-27	1	.	.	1	.	.
16	-26	.	.	.	2	.	.
17	-25	5	.	.	1	.	.
18	-24	1	1	.	1	.	.
19	-23	1	1	.	1	.	.
20	-22	2	.	.	2	.	.
21	-21	4	.	.	3	.	.
22	-20	3	.	.	4	.	.
23	-19	6	.	.	7	4	.
24	-18	13	.	.	15	11	.
25	-17	28	.	.	33	28	.
26	-16	37	.	.	56	45	1
27	-15	82	3	.	100	47	.
28	-14	136	4	.	191	115	2
29	-13	236	6	.	354	180	1
30	-12	376	11	1	703	255	2
31	-11	605	27	1	1389	380	4
32	-10	1040	56	2	2417	593	10
33	-9	1598	95	6	3750	1016	18
34	-8	2453	207	23	5817	1656	58
35	-7	3852	406	44	8297	2810	94
36	-6	5870	808	117	12145	4384	210
37	-5	9353	1629	287	16409	6516	489

RDC datacut EBV (me) and official EBV (e) for nongenotyped females with phenotype

Obs	diff	d_dSB1	d_dCE1	d_dCS1	d_dSB2	d_dCE2	d_dCS2
38	-4	14686	2906	669	23175	9834	1093
39	-3	23982	6147	1512	33576	15321	2206
40	-2	44220	13762	3941	50804	26296	4940
41	-1	110133	53739	20109	95567	68979	18259
42	0	237564	205219	74045	255129	226533	85410
43	1	81748	42490	19578	230910	68254	38300
44	2	23538	4213	5827	97407	7286	14255
45	3	10130	1405	2653	47376	1687	7490
46	4	5052	693	1231	24805	546	4194
47	5	2565	334	594	13723	276	2359
48	6	1242	168	275	7687	107	1314
49	7	613	83	122	4425	59	643
50	8	308	37	35	2646	29	338
51	9	214	13	18	1510	18	147
52	10	123	8	11	861	5	76
53	11	61	5	3	449	8	32
54	12	30	2	.	253	.	13
55	13	26	1	3	175	2	4
56	14	8	.	5	108	.	1
57	15	12	1	1	84	1	.
58	16	5	.	.	61	.	.
59	17	5	.	.	46	.	1
60	18	3	.	.	45	.	.
61	19	.	.	.	24	.	.
62	20	3	.	.	16	.	.
63	21	.	.	.	7	.	.
64	22	4	.	.	7	.	.
65	23	1	.	.	4	.	.
66	24	.	.	.	4	.	.
67	25	2	.	.	3	.	.
68	26	.	.	.	6	.	.
69	27	1	.	.	1	.	.
70	28	1	.	.	3	.	.
71	29	1	.	.	2	.	.
72	30	.	.	.	.	.	.
73	31	.	.	.	1	.	.
74	32	.	.	.	.	.	.

RDC datacut EBV (me) and official EBV (e) for nongenotyped females with phenotype

Obs	diff	d_dSB1	d_dCE1	d_dCS1	d_dSB2	d_dCE2	d_dCS2
75	33	.	.	.	.	.	.
76	34	.	.	.	.	.	.
77	35	.	.	.	.	.	.
78	37	.	.	.	.	.	.

RDC datacut EBV (me) and official EBV (e) for nongenotyped females with phenotype

Obs	diff	d_mSB1	d_mCE1	d_mCS1	d_mSB2	d_mCE2	d_mCS2
1	-56	.	.	.	.	.	.
2	-54	.	.	.	.	.	.
3	-43	.	.	.	.	.	.
4	-41	.	.	.	.	.	.
5	-40	.	.	.	.	.	.
6	-39	.	.	.	1	.	.
7	-37	.	.	.	.	.	.
8	-34	.	.	.	.	.	.
9	-33	.	.	.	.	.	.
10	-32	.	.	.	.	.	.
11	-31	.	.	.	.	.	.
12	-30	.	.	.	.	.	.
13	-29	.	.	.	.	.	.
14	-28	1	.	.	1	.	.
15	-27	.	.	.	1	.	.
16	-26	1	.	.	.	.	.
17	-25	.	.	.	1	.	.
18	-24	.	.	.	1	.	.
19	-23	1	.	.	.	.	.
20	-22	.	.	.	.	.	.
21	-21	1	.	.	.	.	.
22	-20	.	.	.	2	.	.
23	-19	.	.	1	1	.	.
24	-18	.	1	2	2	.	.
25	-17	.	1	4	2	.	.
26	-16	1	.	15	5	.	.
27	-15	1	.	24	4	.	1
28	-14	4	.	44	5	.	2
29	-13	12	.	59	3	1	2
30	-12	3	1	86	15	.	8
31	-11	7	1	145	23	1	17
32	-10	18	1	228	43	1	18
33	-9	43	6	402	64	.	55
34	-8	127	18	702	83	5	89
35	-7	434	53	1195	149	12	167
36	-6	1245	135	2046	319	21	310
37	-5	3608	422	3519	802	100	657

RDC datacut EBV (me) and official EBV (e) for nongenotyped females with phenotype

Obs	diff	d_mSB1	d_mCE1	d_mCS1	d_mSB2	d_mCE2	d_mCS2
38	-4	9665	1436	6320	1780	490	1287
39	-3	25379	6268	11917	3624	2650	2486
40	-2	69597	29211	25364	10776	14335	5449
41	-1	200510	141314	71888	43823	84797	15078
42	0	328148	273614	62442	167033	194413	60756
43	1	180819	104827	15160	221698	94748	44298
44	2	79561	34754	6423	131504	39180	14867
45	3	45330	15761	3105	76739	19706	6381
46	4	26820	7636	1654	46432	10571	2765
47	5	15203	3969	782	27011	5646	1307
48	6	8498	1908	341	15159	2793	543
49	7	4486	1003	174	8596	1384	251
50	8	2318	573	83	4396	688	92
51	9	1216	387	31	2283	398	30
52	10	683	245	17	1163	249	17
53	11	398	144	9	583	200	10
54	12	232	76	6	346	136	4
55	13	172	66	4	153	100	2
56	14	121	58	1	71	61	1
57	15	87	27	2	39	42	1
58	16	60	16	1	24	33	.
59	17	68	7	.	16	11	.
60	18	35	3	.	13	12	.
61	19	34	1	.	13	11	.
62	20	21	3	.	6	13	.
63	21	10	.	.	1	3	.
64	22	14	3	.	2	4	.
65	23	11	3	.	2	.	.
66	24	7	1	.	1	.	.
67	25	5	1	.	.	.	.
68	26	3	.	.	1	.	.
69	27	5	.	.	.	.	.
70	28	.	.	.	.	.	.
71	29	2	.	.	1	.	.
72	30	2	.	.	.	.	.
73	31	2	.	.	.	.	.
74	32	1	.	.	.	.	.

RDC datacut EBV (me) and official EBV (e) for nongenotyped females with phenotype

Obs	diff	d_mSB1	d_mCE1	d_mCS1	d_mSB2	d_mCE2	d_mCS2
75	33	2	.	.	.	.	.
76	34	4	.	.	.	.	.
77	35	.	.	.	.	.	.
78	37	1	.	.	.	.	.

RDC datacut EBV (me) and official EBV (e) for nongenotyped females with phenotype

Obs	diff	p_dSB1	p_dCE1	p_dCS1	p_dSB2	p_dCE2	p_dCS2
1	-56	.	.	.	.	.	.
2	-54	0	.	.	.	.	.
3	-43	.	.	.	.	.	.
4	-41	.	.	.	0	.	.
5	-40	0	.	.	0	.	.
6	-39	.	.	.	.	.	.
7	-37	0	.	.	.	.	.
8	-34	.	.	.	.	.	.
9	-33	.	.	.	0	.	.
10	-32	0	.	.	.	.	.
11	-31	.	.	.	.	.	.
12	-30	.	.	.	0	.	.
13	-29	.	.	.	0	.	.
14	-28	.	.	.	0	0	.
15	-27	0	.	.	0	.	.
16	-26	.	.	.	0	.	.
17	-25	0	.	.	0	.	.
18	-24	0	0	.	0	.	.
19	-23	0	0	.	0	.	.
20	-22	0	.	.	0	.	.
21	-21	0	.	.	0	.	.
22	-20	0	.	.	0	.	.
23	-19	0	.	.	0	0	.
24	-18	0	.	.	0	0	.
25	-17	0	.	.	0	0	.
26	-16	0	.	.	0	0	0
27	-15	0	0	.	0	0	.
28	-14	0	0	.	0	0	0
29	-13	0	0	.	0	0	0
30	-12	0	0	0	0	0	0
31	-11	0	0	0	0	0	0
32	-10	0	0	0	0	0	0
33	-9	0	0	0	0	0	0
34	-8	0	0	0	1	0	0
35	-7	1	0	0	1	1	0
36	-6	1	0	0	1	1	0
37	-5	2	0	0	2	1	0

RDC datacut EBV (me) and official EBV (e) for nongenotyped females with phenotype

Obs	diff	p_dSB1	p_dCE1	p_dCS1	p_dSB2	p_dCE2	p_dCS2
38	-4	3	1	1	2	2	1
39	-3	4	2	1	4	3	1
40	-2	8	4	3	5	6	3
41	-1	19	16	15	10	16	10
42	0	41	61	56	27	51	47
43	1	14	13	15	24	15	21
44	2	4	1	4	10	2	8
45	3	2	0	2	5	0	4
46	4	1	0	1	3	0	2
47	5	0	0	0	1	0	1
48	6	0	0	0	1	0	1
49	7	0	0	0	0	0	0
50	8	0	0	0	0	0	0
51	9	0	0	0	0	0	0
52	10	0	0	0	0	0	0
53	11	0	0	0	0	0	0
54	12	0	0	.	0	.	0
55	13	0	0	0	0	0	0
56	14	0	.	0	0	.	0
57	15	0	0	0	0	0	.
58	16	0	.	.	0	.	.
59	17	0	.	.	0	.	0
60	18	0	.	.	0	.	.
61	19	.	.	.	0	.	.
62	20	0	.	.	0	.	.
63	21	.	.	.	0	.	.
64	22	0	.	.	0	.	.
65	23	0	.	.	0	.	.
66	24	.	.	.	0	.	.
67	25	0	.	.	0	.	.
68	26	.	.	.	0	.	.
69	27	0	.	.	0	.	.
70	28	0	.	.	0	.	.
71	29	0	.	.	0	.	.
72	30	.	.	.	.	.	.
73	31	.	.	.	0	.	.
74	32	.	.	.	.	.	.

RDC datacut EBV (me) and official EBV (e) for nongenotyped females with phenotype

Obs	diff	p_dSB1	p_dCE1	p_dCS1	p_dSB2	p_dCE2	p_dCS2
75	33	.	.	.	.	.	.
76	34	.	.	.	.	.	.
77	35	.	.	.	.	.	.
78	37	.	.	.	.	.	.

RDC datacut EBV (me) and official EBV (e) for nongenotyped females with phenotype

Obs	diff	p_mSB1	p_mCE1	p_mCS1	p_mSB2	p_mCE2	p_mCS2
1	-56	.	.	.	.	.	.
2	-54	.	.	.	.	.	.
3	-43	.	.	.	.	.	.
4	-41	.	.	.	.	.	.
5	-40	.	.	.	.	.	.
6	-39	.	.	.	0	.	.
7	-37	.	.	.	.	.	.
8	-34	.	.	.	.	.	.
9	-33	.	.	.	.	.	.
10	-32	.	.	.	.	.	.
11	-31	.	.	.	.	.	.
12	-30	.	.	.	.	.	.
13	-29	.	.	.	.	.	.
14	-28	0	.	.	0	.	.
15	-27	.	.	.	0	.	.
16	-26	0	.	.	.	.	.
17	-25	.	.	.	0	.	.
18	-24	.	.	.	0	.	.
19	-23	0	.	.	.	.	.
20	-22	.	.	.	.	.	.
21	-21	0	.	.	.	.	.
22	-20	.	.	.	0	.	.
23	-19	.	.	0	0	.	.
24	-18	.	0	0	0	.	.
25	-17	.	0	0	0	.	.
26	-16	0	.	0	0	.	.
27	-15	0	.	0	0	.	0
28	-14	0	.	0	0	.	0
29	-13	0	.	0	0	0	0
30	-12	0	0	0	0	.	0
31	-11	0	0	0	0	0	0
32	-10	0	0	0	0	0	0
33	-9	0	0	0	0	.	0
34	-8	0	0	0	0	0	0
35	-7	0	0	1	0	0	0
36	-6	0	0	1	0	0	0
37	-5	0	0	2	0	0	0

RDC datacut EBV (me) and official EBV (e) for nongenotyped females with phenotype

Obs	diff	p_mSB1	p_mCE1	p_mCS1	p_mSB2	p_mCE2	p_mCS2
38	-4	1	0	3	0	0	1
39	-3	3	1	6	0	1	2
40	-2	7	5	12	1	3	3
41	-1	20	23	34	6	18	10
42	0	33	44	29	22	41	39
43	1	18	17	7	29	20	28
44	2	8	6	3	17	8	9
45	3	5	3	1	10	4	4
46	4	3	1	1	6	2	2
47	5	2	1	0	4	1	1
48	6	1	0	0	2	1	0
49	7	0	0	0	1	0	0
50	8	0	0	0	1	0	0
51	9	0	0	0	0	0	0
52	10	0	0	0	0	0	0
53	11	0	0	0	0	0	0
54	12	0	0	0	0	0	0
55	13	0	0	0	0	0	0
56	14	0	0	0	0	0	0
57	15	0	0	0	0	0	0
58	16	0	0	0	0	0	.
59	17	0	0	.	0	0	.
60	18	0	0	.	0	0	.
61	19	0	0	.	0	0	.
62	20	0	0	.	0	0	.
63	21	0	.	.	0	0	.
64	22	0	0	.	0	0	.
65	23	0	0	.	0	.	.
66	24	0	0	.	0	.	.
67	25	0	0	.	.	.	.
68	26	0	.	.	0	.	.
69	27	0	.	.	.	.	.
70	28	.	.	.	.	.	.
71	29	0	.	.	0	.	.
72	30	0	.	.	.	.	.
73	31	0	.	.	.	.	.
74	32	0	.	.	.	.	.

RDC datacut EBV (me) and official EBV (e) for nongenotyped females with phenotype

Obs	diff	p_mSB1	p_mCE1	p_mCS1	p_mSB2	p_mCE2	p_mCS2
75	33	0	.	.	.	.	.
76	34	0	.	.	.	.	.
77	35	.	.	.	.	.	.
78	37	0	.	.	.	.	.

RDC datacut EBV (me) and official EBV (e) for nordic AI bulls with minimum 15 offspring

Obs	BYR	name	no	mean_noff	std_noff	mean_me	mean_e	std_me	std_e	mean_dif	std_dif	corr
1	2000	dSB1	266	511	1527	95.2	95.5	10.2	10.0	-0.3	2.3	0.97
2	2001	dSB1	248	390	1104	95.4	95.8	10.6	10.5	-0.4	2.2	0.98
3	2002	dSB1	215	381	1409	95.7	96.1	9.2	9.2	-0.4	2.1	0.97
4	2003	dSB1	237	412	1493	94.9	95.3	9.6	9.6	-0.4	1.8	0.98
5	2004	dSB1	226	410	1559	94.1	94.5	10.6	10.6	-0.5	1.6	0.99
6	2005	dSB1	216	346	1125	95.8	96.0	14.0	14.0	-0.1	1.4	1.00
7	2006	dSB1	219	285	955	93.2	93.4	11.2	11.3	-0.1	1.4	0.99
8	2007	dSB1	219	235	702	95.2	95.4	9.9	9.9	-0.2	0.9	1.00
9	2008	dSB1	200	207	361	95.4	95.6	10.8	10.8	-0.2	1.0	1.00
10	2009	dSB1	159	208	273	97.9	97.9	9.0	9.0	0.0	0.9	1.00
11	2010	dSB1	165	237	530	96.7	96.9	9.1	9.1	-0.2	0.9	1.00
12	2011	dSB1	168	316	648	98.7	98.7	8.8	8.6	-0.1	0.7	1.00
13	2012	dSB1	167	304	561	98.7	98.9	7.8	7.7	-0.2	0.6	1.00
14	2013	dSB1	118	409	709	99.2	99.1	8.0	8.0	0.1	0.6	1.00
15	2014	dSB1	83	611	875	99.3	99.1	8.4	8.4	0.1	0.6	1.00
16	2015	dSB1	69	660	846	100.4	100.4	6.5	6.4	0.1	0.5	1.00
17	2016	dSB1	69	603	787	100.7	100.7	7.5	7.4	0.0	0.3	1.00
18	2017	dSB1	66	632	786	99.9	99.9	6.6	6.5	0.0	0.4	1.00
19	2018	dSB1	52	697	981	99.7	99.6	5.7	5.6	0.0	0.5	1.00
20	2019	dSB1	48	562	619	101.2	101.0	8.7	8.6	0.2	0.4	1.00
21	2020	dSB1	52	579	676	101.9	101.7	7.4	7.2	0.2	0.4	1.00
22	2021	dSB1	36	301	288	102.2	101.9	6.4	6.3	0.3	0.4	1.00
23	2000	dCE1	169	472	1556	97.2	97.3	10.8	10.9	-0.1	0.8	1.00
24	2001	dCE1	220	287	938	97.7	97.7	10.6	10.5	-0.1	0.9	1.00
25	2002	dCE1	215	301	1204	98.7	98.7	9.6	9.6	0.0	0.9	1.00
26	2003	dCE1	237	316	1213	99.4	99.4	10.2	10.2	0.0	0.8	1.00
27	2004	dCE1	226	315	1296	98.2	98.1	10.5	10.5	0.1	0.8	1.00
28	2005	dCE1	216	271	913	100.1	100.0	9.4	9.4	0.1	0.7	1.00
29	2006	dCE1	219	233	815	96.1	96.0	11.1	11.1	0.1	0.8	1.00
30	2007	dCE1	219	194	573	98.4	98.4	10.5	10.4	0.0	0.5	1.00
31	2008	dCE1	199	171	313	97.5	97.4	10.3	10.2	0.1	0.5	1.00
32	2009	dCE1	158	168	220	100.3	100.1	9.1	9.1	0.2	0.5	1.00
33	2010	dCE1	165	185	408	98.6	98.5	10.1	10.1	0.1	0.5	1.00
34	2011	dCE1	166	263	547	100.4	100.3	10.5	10.5	0.1	0.6	1.00
35	2012	dCE1	166	246	459	100.1	99.9	9.6	9.6	0.1	0.4	1.00
36	2013	dCE1	118	335	622	99.7	99.4	9.3	9.2	0.2	0.4	1.00
37	2014	dCE1	83	511	760	99.7	99.5	10.1	10.1	0.2	0.4	1.00

RDC datacut EBV (me) and official EBV (e) for nordic AI bulls with minimum 15 offspring

Obs	BYR	name	no	mean_noff	std_noff	mean_me	mean_e	std_me	std_e	mean_dif	std_dif	corr
38	2015	dCE1	69	543	739	100.9	100.8	8.2	8.0	0.1	0.4	1.00
39	2016	dCE1	69	506	675	101.7	101.6	8.2	8.0	0.1	0.4	1.00
40	2017	dCE1	66	525	661	100.7	100.6	8.7	8.7	0.0	0.3	1.00
41	2018	dCE1	52	591	855	102.1	102.1	7.1	7.0	0.0	0.5	1.00
42	2019	dCE1	48	462	525	102.0	101.9	8.5	8.4	0.1	0.4	1.00
43	2020	dCE1	52	486	566	101.1	101.1	6.8	6.9	0.0	0.4	1.00
44	2021	dCE1	36	259	241	102.9	102.7	6.3	6.4	0.2	0.3	1.00
45	2000	dCS1	44	321	712	110.9	111.2	13.9	13.8	-0.3	0.9	1.00
46	2001	dCS1	42	162	388	109.9	109.8	12.1	11.8	0.1	0.6	1.00
47	2002	dCS1	51	289	1462	107.0	107.1	12.2	12.2	-0.1	0.8	1.00
48	2003	dCS1	50	177	535	107.5	107.6	14.1	13.9	-0.1	0.6	1.00
49	2004	dCS1	50	306	1136	108.3	108.5	12.8	12.7	-0.3	0.5	1.00
50	2005	dCS1	38	127	250	101.9	102.2	14.5	14.4	-0.2	0.5	1.00
51	2006	dCS1	47	211	708	104.7	104.8	11.9	11.8	-0.1	0.6	1.00
52	2007	dCS1	64	123	476	105.5	105.7	12.4	12.3	-0.1	0.5	1.00
53	2008	dCS1	57	79	96	103.0	103.1	11.2	11.0	-0.1	0.4	1.00
54	2009	dCS1	46	66	85	101.5	101.7	12.1	11.9	-0.2	0.4	1.00
55	2010	dCS1	44	107	181	104.7	104.8	13.1	12.9	-0.1	0.4	1.00
56	2011	dCS1	46	84	128	100.3	100.4	11.9	11.8	-0.1	0.9	1.00
57	2012	dCS1	59	121	200	100.8	100.9	12.9	12.7	-0.1	0.4	1.00
58	2013	dCS1	48	174	249	100.8	100.9	11.3	11.3	-0.1	0.3	1.00
59	2014	dCS1	32	270	295	98.9	99.1	13.5	13.3	-0.1	0.3	1.00
60	2015	dCS1	35	262	285	97.8	98.0	11.3	11.1	-0.2	0.4	1.00
61	2016	dCS1	33	227	241	98.0	98.1	10.5	10.4	-0.1	0.3	1.00
62	2017	dCS1	36	240	279	99.8	99.9	11.1	11.1	-0.1	0.3	1.00
63	2018	dCS1	27	203	275	96.1	96.1	11.0	10.8	0.0	0.3	1.00
64	2019	dCS1	29	196	226	99.8	99.8	10.8	10.6	0.0	0.4	1.00
65	2020	dCS1	26	218	198	100.2	100.2	11.3	11.0	0.0	0.4	1.00
66	2021	dCS1	20	146	120	98.5	98.5	10.4	10.3	-0.1	0.5	1.00
67	2000	dSB2	266	909	2769	97.0	96.7	9.7	9.7	0.3	2.4	0.97
68	2001	dSB2	248	570	1467	97.1	96.8	10.0	10.4	0.4	2.3	0.97
69	2002	dSB2	215	599	1905	96.1	96.1	9.9	10.4	0.0	2.5	0.97
70	2003	dSB2	237	635	2168	95.7	95.5	9.2	9.3	0.2	2.0	0.98
71	2004	dSB2	227	863	3976	94.3	94.3	10.2	10.5	0.1	1.8	0.98
72	2005	dSB2	216	560	1911	97.7	97.4	16.0	16.2	0.3	1.5	1.00
73	2006	dSB2	219	512	1644	94.7	94.6	11.5	11.5	0.2	1.4	0.99
74	2007	dSB2	219	428	1232	96.3	96.1	10.5	10.5	0.2	1.3	0.99

RDC datacut EBV (me) and official EBV (e) for nordic AI bulls with minimum 15 offspring

Obs	BYR	name	no	mean_noff	std_noff	mean_me	mean_e	std_me	std_e	mean_dif	std_dif	corr
75	2008	dSB2	201	374	591	96.2	95.9	10.4	10.5	0.3	1.1	0.99
76	2009	dSB2	159	354	390	98.0	97.8	8.9	9.0	0.2	0.8	1.00
77	2010	dSB2	165	390	779	96.0	95.9	8.4	8.5	0.1	0.7	1.00
78	2011	dSB2	168	547	1134	99.7	99.6	8.8	8.7	0.1	0.8	1.00
79	2012	dSB2	169	515	880	98.6	98.6	7.9	7.8	0.0	0.7	1.00
80	2013	dSB2	121	684	1100	98.3	98.3	9.4	9.4	0.0	1.3	0.99
81	2014	dSB2	83	1024	1346	99.5	99.2	7.1	7.0	0.3	0.7	1.00
82	2015	dSB2	69	1053	1166	99.4	99.3	7.6	7.6	0.2	0.4	1.00
83	2016	dSB2	70	1055	1477	100.1	100.1	7.9	7.9	0.0	0.4	1.00
84	2017	dSB2	66	1058	1358	100.0	100.1	6.8	6.7	-0.1	0.4	1.00
85	2018	dSB2	52	1217	1597	100.1	100.3	5.2	5.2	-0.1	0.5	1.00
86	2019	dSB2	50	877	948	100.4	100.1	7.5	7.5	0.3	0.3	1.00
87	2020	dSB2	52	895	1021	102.3	102.3	6.2	6.1	0.0	0.4	1.00
88	2021	dSB2	42	408	466	100.4	100.3	6.9	6.7	0.1	0.4	1.00
89	2000	dCE2	171	760	2301	96.4	96.5	10.2	10.0	-0.1	1.0	1.00
90	2001	dCE2	198	404	1262	96.9	96.8	10.1	10.1	0.1	1.1	0.99
91	2002	dCE2	215	390	1432	97.4	97.3	9.2	9.2	0.1	1.5	0.99
92	2003	dCE2	236	409	1578	98.0	97.7	10.4	10.3	0.3	1.0	1.00
93	2004	dCE2	227	599	3121	97.6	97.5	10.6	10.7	0.1	1.2	0.99
94	2005	dCE2	216	388	1461	99.8	99.6	11.4	11.4	0.2	0.8	1.00
95	2006	dCE2	219	373	1299	94.1	94.0	12.1	12.1	0.1	1.0	1.00
96	2007	dCE2	219	331	929	97.3	97.2	10.3	10.2	0.1	0.6	1.00
97	2008	dCE2	200	288	507	95.7	95.6	12.2	12.2	0.1	0.6	1.00
98	2009	dCE2	158	259	302	100.2	100.1	10.4	10.5	0.1	0.5	1.00
99	2010	dCE2	165	286	575	97.9	97.7	10.3	10.3	0.1	0.5	1.00
100	2011	dCE2	168	433	948	100.8	100.7	10.1	10.0	0.1	0.9	1.00
101	2012	dCE2	168	398	696	99.5	99.4	10.0	10.0	0.1	0.4	1.00
102	2013	dCE2	121	537	922	98.7	98.8	10.5	10.4	-0.1	1.9	0.98
103	2014	dCE2	83	837	1153	99.2	99.0	9.0	9.0	0.2	0.5	1.00
104	2015	dCE2	69	830	966	100.7	100.6	8.1	8.0	0.0	0.4	1.00
105	2016	dCE2	70	874	1238	100.4	100.5	8.1	8.1	0.0	0.4	1.00
106	2017	dCE2	66	862	1123	101.1	101.1	8.2	8.1	0.0	0.4	1.00
107	2018	dCE2	52	1022	1362	101.6	101.5	7.6	7.6	0.1	0.4	1.00
108	2019	dCE2	50	707	787	101.9	101.9	7.0	7.0	0.0	0.3	1.00
109	2020	dCE2	52	735	827	101.2	101.3	6.8	6.7	-0.1	0.4	1.00
110	2021	dCE2	40	357	377	102.2	102.2	6.0	6.0	0.0	0.4	1.00
111	2000	dCS2	49	637	1771	110.1	109.7	14.8	14.8	0.4	0.9	1.00

RDC datacut EBV (me) and official EBV (e) for nordic AI bulls with minimum 15 offspring

Obs	BYR	name	no	mean_noff	std_noff	mean_me	mean_e	std_me	std_e	mean_dif	std_dif	corr
112	2001	dCS2	43	259	294	109.7	109.7	13.7	13.4	0.0	0.5	1.00
113	2002	dCS2	57	335	884	107.8	107.7	12.0	12.0	0.1	0.6	1.00
114	2003	dCS2	52	254	426	106.6	106.7	14.2	14.0	0.0	0.6	1.00
115	2004	dCS2	53	492	1377	108.1	108.0	15.0	14.9	0.1	0.8	1.00
116	2005	dCS2	41	201	248	100.4	100.5	17.0	16.9	-0.1	0.4	1.00
117	2006	dCS2	50	294	729	105.1	104.9	12.2	12.2	0.2	0.8	1.00
118	2007	dCS2	73	216	563	105.8	105.8	12.9	12.8	0.0	0.4	1.00
119	2008	dCS2	60	210	257	105.8	105.9	11.4	11.2	-0.1	0.4	1.00
120	2009	dCS2	51	143	154	102.4	102.4	12.6	12.6	0.0	0.3	1.00
121	2010	dCS2	44	201	268	106.6	106.7	14.7	14.5	-0.1	0.4	1.00
122	2011	dCS2	58	146	169	101.1	101.0	13.4	13.2	0.0	0.7	1.00
123	2012	dCS2	66	191	258	101.8	101.9	13.5	13.2	-0.1	0.4	1.00
124	2013	dCS2	56	218	283	99.9	99.9	11.5	11.3	0.0	0.8	1.00
125	2014	dCS2	43	283	308	99.4	99.5	11.9	11.8	-0.1	0.4	1.00
126	2015	dCS2	43	292	337	99.1	99.2	10.8	10.6	-0.1	0.4	1.00
127	2016	dCS2	40	318	348	99.8	99.9	13.4	13.2	-0.1	0.4	1.00
128	2017	dCS2	44	275	300	100.5	100.6	10.8	10.6	-0.1	0.4	1.00
129	2018	dCS2	39	238	237	98.1	98.1	11.6	11.4	0.0	0.4	1.00
130	2019	dCS2	35	252	239	98.0	98.2	11.7	11.6	-0.2	0.3	1.00
131	2020	dCS2	31	233	216	98.2	98.3	11.2	11.1	-0.2	0.4	1.00
132	2021	dCS2	22	178	141	97.5	97.5	12.3	12.1	-0.1	0.4	1.00
133	2000	mSB1	266	505	1491	93.7	93.4	10.9	10.3	0.3	2.0	0.98
134	2001	mSB1	248	318	860	93.5	93.2	10.5	9.9	0.3	2.0	0.98
135	2002	mSB1	215	341	1278	92.8	92.2	9.2	8.8	0.6	2.1	0.97
136	2003	mSB1	237	335	1228	92.6	92.1	11.9	11.0	0.5	2.0	0.99
137	2004	mSB1	227	428	1882	94.1	93.8	10.8	10.3	0.4	1.8	0.99
138	2005	mSB1	216	292	996	94.0	93.6	11.5	11.0	0.4	1.8	0.99
139	2006	mSB1	219	251	825	96.1	96.0	10.1	9.9	0.2	1.5	0.99
140	2007	mSB1	219	216	796	94.2	94.3	10.0	9.3	-0.1	1.4	0.99
141	2008	mSB1	201	173	283	94.1	94.0	9.9	9.3	0.1	1.6	0.99
142	2009	mSB1	158	174	220	97.9	97.7	7.8	7.3	0.2	1.2	0.99
143	2010	mSB1	165	210	497	97.8	97.8	10.1	9.6	0.1	1.2	0.99
144	2011	mSB1	168	236	492	96.5	96.5	8.6	8.3	0.0	1.4	0.99
145	2012	mSB1	169	231	413	98.6	98.5	7.6	7.0	0.1	1.1	0.99
146	2013	mSB1	122	320	532	99.5	99.3	7.5	7.0	0.2	1.2	0.99
147	2014	mSB1	84	483	700	98.0	98.0	9.1	8.4	0.0	1.3	0.99
148	2015	mSB1	71	519	630	98.1	98.3	8.5	7.7	-0.1	1.3	0.99

RDC datacut EBV (me) and official EBV (e) for nordic AI bulls with minimum 15 offspring

Obs	BYR	name	no	mean_noff	std_noff	mean_me	mean_e	std_me	std_e	mean_dif	std_dif	corr
149	2016	mSB1	70	489	709	98.2	98.4	8.3	7.7	-0.2	1.1	0.99
150	2017	mSB1	66	527	750	99.2	99.3	7.4	7.1	-0.1	1.1	0.99
151	2018	mSB1	52	499	715	99.8	99.9	7.8	7.5	0.0	1.3	0.99
152	2019	mSB1	46	221	278	100.4	100.4	9.3	8.8	0.0	1.3	0.99
153	2000	mCE1	266	383	1161	87.4	87.2	10.7	10.4	0.1	1.3	0.99
154	2001	mCE1	248	245	673	89.2	89.2	9.8	9.5	0.0	1.2	0.99
155	2002	mCE1	215	282	1077	88.5	88.2	9.0	8.8	0.3	1.3	0.99
156	2003	mCE1	237	269	930	88.6	88.4	11.6	11.3	0.2	1.1	1.00
157	2004	mCE1	227	345	1518	92.1	91.9	9.5	9.4	0.2	1.1	0.99
158	2005	mCE1	216	241	790	90.8	90.7	10.6	10.3	0.1	1.0	1.00
159	2006	mCE1	219	211	679	93.2	93.0	10.7	10.6	0.2	1.1	0.99
160	2007	mCE1	219	184	668	92.1	92.0	8.7	8.5	0.0	0.9	1.00
161	2008	mCE1	200	147	245	91.7	91.7	9.7	9.5	0.1	0.8	1.00
162	2009	mCE1	158	140	174	94.9	94.8	9.7	9.5	0.1	0.8	1.00
163	2010	mCE1	165	169	399	96.3	96.2	9.9	9.7	0.2	0.7	1.00
164	2011	mCE1	168	194	418	95.8	95.6	9.2	9.2	0.2	1.2	0.99
165	2012	mCE1	169	189	343	99.0	98.7	9.2	8.8	0.2	0.9	1.00
166	2013	mCE1	121	270	465	98.5	98.4	8.8	8.7	0.1	0.8	1.00
167	2014	mCE1	84	406	604	99.5	99.4	8.1	7.9	0.1	1.1	0.99
168	2015	mCE1	71	430	538	97.3	97.6	9.2	8.7	-0.3	0.9	1.00
169	2016	mCE1	70	407	593	99.2	99.3	8.2	8.1	-0.1	0.7	1.00
170	2017	mCE1	66	439	630	99.6	99.6	7.8	7.7	-0.1	0.8	0.99
171	2018	mCE1	52	417	607	100.1	100.2	7.6	7.5	0.0	1.0	0.99
172	2019	mCE1	46	188	240	100.7	100.8	7.6	7.3	-0.1	0.7	1.00
173	2000	mCS1	47	365	904	107.3	108.2	14.5	14.6	-0.9	2.1	0.99
174	2001	mCS1	43	154	255	104.0	105.0	16.9	16.6	-1.0	1.1	1.00
175	2002	mCS1	54	237	919	101.3	102.2	17.3	16.9	-0.9	1.6	1.00
176	2003	mCS1	51	162	359	99.0	99.8	13.2	12.9	-0.8	1.1	1.00
177	2004	mCS1	51	316	931	98.6	99.3	13.4	13.0	-0.6	1.7	0.99
178	2005	mCS1	41	123	187	98.0	98.5	11.0	11.1	-0.6	1.1	1.00
179	2006	mCS1	50	181	521	101.9	102.7	14.2	14.0	-0.8	1.7	0.99
180	2007	mCS1	72	114	344	98.4	98.9	14.1	13.9	-0.5	0.9	1.00
181	2008	mCS1	59	93	108	104.8	105.4	12.8	12.7	-0.6	0.7	1.00
182	2009	mCS1	48	71	81	101.3	101.8	12.8	12.5	-0.5	0.6	1.00
183	2010	mCS1	44	114	171	98.7	99.3	14.0	13.7	-0.6	0.5	1.00
184	2011	mCS1	49	86	102	101.9	102.5	11.4	11.1	-0.6	1.0	1.00
185	2012	mCS1	60	109	152	101.2	101.7	13.8	13.4	-0.5	0.6	1.00

RDC datacut EBV (me) and official EBV (e) for nordic AI bulls with minimum 15 offspring

Obs	BYR	name	no	mean_noff	std_noff	mean_me	mean_e	std_me	std_e	mean_dif	std_dif	corr
186	2013	mCS1	48	146	193	101.2	101.6	11.7	11.4	-0.4	0.5	1.00
187	2014	mCS1	33	219	229	97.6	98.1	12.8	12.5	-0.5	0.5	1.00
188	2015	mCS1	36	199	206	98.9	99.4	13.1	12.8	-0.4	0.5	1.00
189	2016	mCS1	32	196	195	102.3	102.7	13.5	13.1	-0.4	0.5	1.00
190	2017	mCS1	36	189	204	99.1	99.5	11.7	11.5	-0.4	0.4	1.00
191	2018	mCS1	33	160	190	103.4	103.7	10.5	10.2	-0.3	0.5	1.00
192	2019	mCS1	21	115	105	101.0	101.3	12.1	11.9	-0.3	0.4	1.00
193	2000	mSB2	266	399	1235	96.3	94.8	10.1	9.7	1.5	2.3	0.98
194	2001	mSB2	248	249	700	97.9	96.6	10.2	9.8	1.3	2.0	0.98
195	2002	mSB2	215	272	1062	97.6	96.0	9.3	9.2	1.6	1.8	0.98
196	2003	mSB2	237	263	955	96.3	94.8	11.3	10.8	1.5	1.8	0.99
197	2004	mSB2	227	340	1521	99.8	98.5	10.5	10.3	1.3	1.7	0.99
198	2005	mSB2	216	231	831	99.1	98.0	12.0	11.9	1.1	1.7	0.99
199	2006	mSB2	219	190	637	99.7	98.8	9.4	9.3	1.0	1.5	0.99
200	2007	mSB2	218	159	561	98.3	97.5	9.8	9.5	0.8	1.5	0.99
201	2008	mSB2	201	130	217	98.7	97.8	9.8	9.5	0.9	1.6	0.99
202	2009	mSB2	157	127	163	99.7	99.0	8.9	8.7	0.6	1.2	0.99
203	2010	mSB2	165	155	385	102.1	101.5	9.7	9.5	0.5	1.3	0.99
204	2011	mSB2	166	179	382	100.2	99.8	8.4	8.2	0.4	1.4	0.99
205	2012	mSB2	169	174	322	101.3	100.9	8.0	7.8	0.4	1.2	0.99
206	2013	mSB2	121	246	412	103.1	102.8	7.4	7.3	0.3	1.3	0.98
207	2014	mSB2	84	362	519	101.5	101.5	8.2	8.1	0.1	1.3	0.99
208	2015	mSB2	71	388	482	100.2	100.2	9.4	8.9	-0.1	1.3	0.99
209	2016	mSB2	70	340	499	100.8	100.9	8.5	8.2	-0.2	1.3	0.99
210	2017	mSB2	66	323	460	100.8	101.0	7.8	7.9	-0.3	1.4	0.98
211	2018	mSB2	38	177	245	99.8	100.3	7.7	7.6	-0.5	0.8	0.99
212	2000	mCE2	265	280	996	87.4	87.1	11.0	10.6	0.3	1.2	0.99
213	2001	mCE2	247	181	561	90.6	90.3	9.7	9.3	0.3	1.2	0.99
214	2002	mCE2	215	219	918	90.4	90.0	8.7	8.3	0.4	1.3	0.99
215	2003	mCE2	237	204	749	88.5	88.2	11.9	11.4	0.3	1.1	1.00
216	2004	mCE2	227	273	1283	93.0	92.6	9.4	9.1	0.4	1.2	0.99
217	2005	mCE2	216	183	697	91.8	91.7	10.4	10.0	0.1	1.0	1.00
218	2006	mCE2	219	152	545	93.0	92.8	10.6	10.3	0.3	0.9	1.00
219	2007	mCE2	217	134	489	93.7	93.4	9.1	8.7	0.3	0.9	1.00
220	2008	mCE2	200	106	195	93.5	93.3	9.6	9.4	0.3	0.8	1.00
221	2009	mCE2	157	101	134	95.5	95.2	9.5	9.2	0.3	0.9	1.00
222	2010	mCE2	165	128	328	98.2	97.9	9.2	8.9	0.3	0.8	1.00

RDC datacut EBV (me) and official EBV (e) for nordic AI bulls with minimum 15 offspring

Obs	BYR	name	no	mean_noff	std_noff	mean_me	mean_e	std_me	std_e	mean_dif	std_dif	corr
223	2011	mCE2	166	152	335	98.6	98.3	8.7	8.7	0.4	1.1	0.99
224	2012	mCE2	168	147	275	100.7	100.3	8.0	7.8	0.4	0.8	1.00
225	2013	mCE2	117	221	376	99.9	99.7	7.1	6.9	0.2	0.8	0.99
226	2014	mCE2	83	315	456	100.8	100.7	5.9	5.8	0.1	1.0	0.98
227	2015	mCE2	71	329	421	99.7	99.8	8.3	7.8	-0.1	0.8	1.00
228	2016	mCE2	70	288	424	100.2	100.3	7.3	7.1	-0.1	1.0	0.99
229	2017	mCE2	66	269	386	100.7	100.7	5.2	5.0	0.0	0.8	0.99
230	2018	mCE2	38	149	207	101.7	101.9	6.2	5.9	-0.2	0.6	1.00
231	2000	mCS2	45	289	711	114.8	114.1	15.7	15.4	0.7	1.3	1.00
232	2001	mCS2	42	119	196	112.6	111.7	17.5	17.5	0.9	1.3	1.00
233	2002	mCS2	54	191	745	106.8	106.3	16.8	16.5	0.5	1.1	1.00
234	2003	mCS2	50	129	277	103.4	102.8	12.0	11.7	0.6	1.2	1.00
235	2004	mCS2	51	236	700	105.3	104.9	13.8	13.5	0.4	1.2	1.00
236	2005	mCS2	40	93	137	102.2	101.7	10.3	10.2	0.5	0.6	1.00
237	2006	mCS2	47	136	381	106.2	106.1	14.1	14.0	0.1	2.1	0.99
238	2007	mCS2	69	78	220	102.5	102.2	12.1	11.9	0.3	0.7	1.00
239	2008	mCS2	58	66	80	105.5	105.2	12.2	11.9	0.3	0.6	1.00
240	2009	mCS2	42	55	58	101.1	100.9	11.9	11.7	0.2	0.5	1.00
241	2010	mCS2	42	85	134	98.6	98.4	9.2	9.0	0.2	0.4	1.00
242	2011	mCS2	44	65	72	101.7	101.7	11.1	11.0	0.0	1.4	0.99
243	2012	mCS2	57	82	114	100.3	100.3	10.7	10.5	0.0	0.4	1.00
244	2013	mCS2	44	115	144	101.8	101.7	9.9	9.6	0.1	0.4	1.00
245	2014	mCS2	29	165	152	96.5	96.7	12.5	12.2	-0.2	0.4	1.00
246	2015	mCS2	32	144	126	98.2	98.2	11.0	10.9	0.0	0.3	1.00
247	2016	mCS2	29	147	138	101.0	101.0	13.3	13.1	0.0	0.4	1.00
248	2017	mCS2	28	140	127	100.6	100.7	7.7	7.6	-0.2	0.3	1.00
249	2018	mCS2	20	72	79	103.4	103.4	10.5	10.3	-0.1	0.3	1.00
250	2000	brth	266	511	1527	96.0	96.1	10.2	9.9	-0.1	2.1	0.98
251	2001	brth	248	390	1104	96.1	96.2	10.5	10.5	-0.1	2.0	0.98
252	2002	brth	215	381	1409	95.8	96.1	9.5	9.5	-0.3	2.1	0.98
253	2003	brth	237	412	1493	95.2	95.5	9.7	9.6	-0.2	1.7	0.98
254	2004	brth	226	410	1559	94.1	94.4	10.5	10.5	-0.4	1.5	0.99
255	2005	brth	216	346	1125	96.8	96.8	15.1	14.7	0.0	1.4	1.00
256	2006	brth	219	285	955	93.6	93.6	11.6	11.6	0.0	1.4	0.99
257	2007	brth	219	235	702	95.6	95.7	10.4	10.2	-0.1	0.9	1.00
258	2008	brth	200	207	361	95.6	95.5	10.9	10.8	0.0	1.1	0.99
259	2009	brth	159	208	273	98.1	98.0	9.2	9.1	0.1	0.9	1.00

RDC datacut EBV (me) and official EBV (e) for nordic AI bulls with minimum 15 offspring

Obs	BYR	name	no	mean_noff	std_noff	mean_me	mean_e	std_me	std_e	mean_dif	std_dif	corr
260	2010	brth	165	237	530	96.3	96.4	8.8	8.8	-0.1	0.8	1.00
261	2011	brth	168	316	648	99.3	99.2	9.0	8.9	0.1	0.9	1.00
262	2012	brth	167	304	561	98.7	98.8	8.0	8.0	-0.1	0.7	1.00
263	2013	brth	118	409	709	98.9	98.7	8.9	8.8	0.1	0.7	1.00
264	2014	brth	83	611	875	99.3	99.1	7.8	7.8	0.2	0.7	1.00
265	2015	brth	69	660	846	100.1	100.0	6.8	6.7	0.1	0.6	1.00
266	2016	brth	69	603	787	100.6	100.6	7.7	7.6	0.0	0.5	1.00
267	2017	brth	66	632	786	100.0	100.1	6.7	6.6	-0.1	0.6	1.00
268	2018	brth	52	697	981	100.1	100.2	5.4	5.3	-0.1	0.6	0.99
269	2019	brth	48	562	619	101.0	100.8	8.2	8.1	0.2	0.5	1.00
270	2020	brth	52	579	676	102.2	102.0	6.8	6.7	0.1	0.5	1.00
271	2021	brth	36	301	288	101.6	101.7	6.5	6.3	0.0	0.6	1.00
272	2000	calv	266	505	1491	93.3	92.1	10.5	10.0	1.2	2.1	0.98
273	2001	calv	248	318	860	94.2	93.1	10.2	9.5	1.1	2.0	0.98
274	2002	calv	215	341	1278	93.6	92.2	9.0	8.7	1.4	1.9	0.98
275	2003	calv	237	335	1228	92.8	91.5	12.0	11.2	1.2	1.9	0.99
276	2004	calv	227	428	1882	95.7	94.6	10.5	10.0	1.1	1.8	0.99
277	2005	calv	216	292	996	95.2	94.2	11.9	11.3	1.1	1.7	0.99
278	2006	calv	219	251	825	96.9	96.1	9.8	9.7	0.8	1.6	0.99
279	2007	calv	219	216	796	95.1	94.6	9.8	9.3	0.5	1.5	0.99
280	2008	calv	201	173	283	95.2	94.5	9.6	9.1	0.7	1.7	0.99
281	2009	calv	158	174	220	98.0	97.5	8.2	7.8	0.5	1.3	0.99
282	2010	calv	165	210	497	99.4	98.9	9.8	9.4	0.5	1.3	0.99
283	2011	calv	168	236	492	97.8	97.5	8.3	8.1	0.4	1.4	0.99
284	2012	calv	169	231	413	99.7	99.5	7.7	7.3	0.3	1.1	0.99
285	2013	calv	122	320	532	101.0	100.6	7.2	6.8	0.3	1.3	0.98
286	2014	calv	84	483	700	99.5	99.5	8.4	7.7	0.0	1.3	0.99
287	2015	calv	71	519	630	98.8	98.9	9.0	8.1	-0.1	1.4	0.99
288	2016	calv	70	489	709	99.2	99.5	8.0	7.4	-0.2	1.2	0.99
289	2017	calv	66	527	750	99.9	100.1	7.4	7.1	-0.2	1.2	0.99
290	2018	calv	52	499	715	99.8	100.2	7.2	7.0	-0.4	1.3	0.98
291	2019	calv	46	221	278	100.7	100.8	8.9	8.6	-0.2	1.1	0.99

RDC datacut EBV (me) and official EBV (e) for nordic AI bulls with minimum 15 offspring

Obs	diff	d_brth	d_calv	p_brth	p_calv
1	-17	.	.	.	.
2	-13	.	.	.	.
3	-12	.	.	.	.
4	-11	.	.	.	.
5	-10	.	.	.	.
6	-9	.	.	.	.
7	-8	2	.	0	.
8	-7	2	.	0	.
9	-6	8	1	0	0
10	-5	16	1	0	0
11	-4	26	8	1	0
12	-3	85	37	3	1
13	-2	214	195	6	6
14	-1	749	541	23	17
15	0	1271	756	39	23
16	1	643	711	19	22
17	2	165	466	5	14
18	3	72	298	2	9
19	4	32	137	1	4
20	5	6	42	0	1
21	6	4	17	0	1
22	7	2	4	0	0
23	8	1	3	0	0
24	9	.	1	.	0
25	10	.	.	.	.
26	11	.	1	.	0
27	12	.	2	.	0
28	14	.	.	.	.
29	15	1	.	0	.
30	16	.	.	.	.

RDC datacut EBV (me) and official EBV (e) for nordic AI bulls with minimum 15 offspring

Obs	diff	d_dSB1	d_dCE1	d_dCS1	d_dSB2	d_dCE2	d_dCS2
1	-17	.	.	.	.	1	.
2	-13	.	.	.	.	1	.
3	-12	.	.	.	.	1	.
4	-11	.	.	.	1	1	.
5	-10	.	.	.	1	1	.
6	-9	1	.	.	1	1	.
7	-8	.	.	.	4	.	.
8	-7	4	1	.	2	.	.
9	-6	23	1	.	10	.	.
10	-5	14	.	.	21	1	.
11	-4	37	1	.	38	2	.
12	-3	81	6	1	84	13	.
13	-2	233	45	6	141	46	.
14	-1	769	469	221	523	399	181
15	0	1343	1953	597	1304	1873	737
16	1	559	604	95	747	706	122
17	2	132	72	2	236	85	5
18	3	61	14	1	106	25	1
19	4	21	2	1	50	7	1
20	5	11	1	1	29	2	4
21	6	4	.	.	12	.	.
22	7	3	.	.	3	.	.
23	8	1	.	.	2	.	.
24	9	1	.	.	.	.	.
25	10	.	.	.	.	.	.
26	11	.	.	.	1	.	.
27	12	.	.	.	.	.	.
28	14	.	.	.	.	.	.
29	15	.	.	.	.	.	.
30	16	1	.	.	.	.	.

RDC datacut EBV (me) and official EBV (e) for nordic AI bulls with minimum 15 offspring

Obs	diff	d_mSB1	d_mCE1	d_mCS1	d_mSB2	d_mCE2	d_mCS2
1	-17	.	.	.	.	.	.
2	-13	.	.	.	.	.	1
3	-12	.	.	.	.	.	.
4	-11	.	.	.	.	.	.
5	-10	.	.	1	.	.	.
6	-9	.	.	.	.	.	1
7	-8	.	.	1	.	.	.
8	-7	.	.	2	.	.	.
9	-6	1	.	2	.	.	1
10	-5	7	.	2	.	.	.
11	-4	21	2	3	6	1	.
12	-3	93	16	24	29	9	1
13	-2	307	124	87	133	73	5
14	-1	678	729	366	483	607	102
15	0	830	1327	347	746	1258	408
16	1	659	741	55	751	888	244
17	2	349	217	11	445	221	43
18	3	170	43	8	302	67	14
19	4	62	14	.	149	14	4
20	5	36	1	.	76	3	.
21	6	3	.	.	19	.	.
22	7	.	.	.	11	1	.
23	8	.	.	.	4	.	.
24	9	2	1	.	1	1	.
25	10	1	1	.	.	.	.
26	11	1	2	.	1	1	.
27	12	.	.	.	.	1	.
28	14	1	.	.	.	.	.
29	15	.	.	.	.	.	.
30	16	.	.	.	.	.	.

RDC datacut EBV (me) and official EBV (e) for nordic AI bulls with minimum 15 offspring

Obs	diff	p_dSB1	p_dCE1	p_dCS1	p_dSB2	p_dCE2	p_dCS2
1	-17	.	.	.	.	0	.
2	-13	.	.	.	.	0	.
3	-12	.	.	.	.	0	.
4	-11	.	.	.	0	0	.
5	-10	.	.	.	0	0	.
6	-9	0	.	.	0	0	.
7	-8	.	.	.	0	.	.
8	-7	0	0	.	0	.	.
9	-6	1	0	.	0	.	.
10	-5	0	.	.	1	0	.
11	-4	1	0	.	1	0	.
12	-3	2	0	0	3	0	.
13	-2	7	1	1	4	1	.
14	-1	23	15	24	16	13	17
15	0	41	62	65	39	59	70
16	1	17	19	10	23	22	12
17	2	4	2	0	7	3	0
18	3	2	0	0	3	1	0
19	4	1	0	0	2	0	0
20	5	0	0	0	1	0	0
21	6	0	.	.	0	.	.
22	7	0	.	.	0	.	.
23	8	0	.	.	0	.	.
24	9	0	.	.	.	.	.
25	10	.	.	.	.	.	.
26	11	.	.	.	0	.	.
27	12	.	.	.	.	.	.
28	14	.	.	.	.	.	.
29	15	.	.	.	.	.	.
30	16	0	.	.	.	.	.

RDC datacut EBV (me) and official EBV (e) for nordic AI bulls with minimum 15 offspring

Obs	diff	p_mSB1	p_mCE1	p_mCS1	p_mSB2	p_mCE2	p_mCS2
1	-17	.	.	.	.	.	.
2	-13	.	.	.	.	.	0
3	-12	.	.	.	.	.	.
4	-11	.	.	.	.	.	.
5	-10	.	.	0	.	.	.
6	-9	.	.	.	.	.	0
7	-8	.	.	0	.	.	.
8	-7	.	.	0	.	.	.
9	-6	0	.	0	.	.	0
10	-5	0	.	0	.	.	.
11	-4	1	0	0	0	0	.
12	-3	3	0	3	1	0	0
13	-2	10	4	10	4	2	1
14	-1	21	23	40	15	19	12
15	0	26	41	38	24	40	50
16	1	20	23	6	24	28	30
17	2	11	7	1	14	7	5
18	3	5	1	1	10	2	2
19	4	2	0	.	5	0	0
20	5	1	0	.	2	0	.
21	6	0	.	.	1	.	.
22	7	.	.	.	0	0	.
23	8	.	.	.	0	.	.
24	9	0	0	.	0	0	.
25	10	0	0	.	.	.	.
26	11	0	0	.	0	0	.
27	12	.	.	.	.	0	.
28	14	0	.	.	.	.	.
29	15	.	.	.	.	.	.
30	16	.	.	.	.	.	.

RDC SS and traditional breeding value for nongenotyped females with phenotype

Obs	BYR	name	no	mean_ss	mean_e	std_ss	std_e	mean_dif	std_dif	corr_SS
1	2010	dSB1	28912	95.6	96.1	6.2	6.4	-0.4	0.9	0.99
2	2011	dSB1	27938	96.1	96.8	5.8	5.9	-0.7	1.0	0.99
3	2012	dSB1	25957	95.9	96.7	5.8	6.0	-0.8	1.0	0.98
4	2013	dSB1	25507	96.3	97.1	5.5	5.6	-0.8	1.1	0.98
5	2014	dSB1	23714	96.6	97.4	5.4	5.6	-0.8	1.2	0.98
6	2015	dSB1	21585	97.6	98.4	5.5	5.7	-0.8	1.2	0.98
7	2016	dSB1	18680	97.8	98.4	5.4	5.6	-0.6	1.2	0.98
8	2017	dSB1	15483	98.4	98.7	5.3	5.4	-0.3	1.1	0.98
9	2018	dSB1	13191	99.1	99.3	5.2	5.3	-0.3	1.2	0.98
10	2019	dSB1	11482	99.1	99.2	5.4	5.6	-0.2	1.2	0.98
11	2020	dSB1	9873	100.0	99.8	5.3	5.3	0.1	1.1	0.98
12	2021	dSB1	8383	99.4	99.1	5.2	5.3	0.3	1.2	0.98
13	2022	dSB1	7888	99.9	99.3	5.4	5.6	0.7	1.2	0.98
14	2023	dSB1	6766	100.5	99.5	4.3	4.4	1.1	1.3	0.96
15	2024	dSB1	1567	101.4	100.1	4.0	4.1	1.3	1.3	0.95
16	2010	dCE1	21032	97.1	97.9	6.9	7.1	-0.8	0.9	0.99
17	2011	dCE1	20343	97.6	98.5	6.4	6.5	-0.9	1.0	0.99
18	2012	dCE1	18741	97.8	98.6	6.4	6.5	-0.8	1.1	0.99
19	2013	dCE1	17902	97.8	98.5	6.5	6.6	-0.8	1.2	0.98
20	2014	dCE1	16702	98.2	98.8	6.3	6.5	-0.7	1.3	0.98
21	2015	dCE1	14939	98.6	99.2	6.3	6.4	-0.6	1.3	0.98
22	2016	dCE1	13419	98.1	98.5	6.3	6.3	-0.4	1.2	0.98
23	2017	dCE1	11257	98.2	98.5	6.1	6.2	-0.3	1.2	0.98
24	2018	dCE1	9469	99.0	99.2	6.1	6.2	-0.1	1.2	0.98
25	2019	dCE1	8367	99.8	99.9	5.5	5.6	-0.1	1.2	0.98
26	2020	dCE1	6995	99.5	99.4	6.1	6.2	0.1	1.2	0.98
27	2021	dCE1	6096	100.4	100.1	5.4	5.5	0.3	1.2	0.98
28	2022	dCE1	5911	99.6	99.0	5.7	5.8	0.5	1.1	0.98
29	2023	dCE1	5015	100.4	99.7	4.7	4.7	0.7	1.2	0.97
30	2024	dCE1	1153	101.3	100.5	4.5	4.5	0.8	1.4	0.95
31	2010	dCS1	6661	106.1	105.7	7.5	7.9	0.4	1.0	0.99
32	2011	dCS1	6576	104.5	103.9	7.7	8.1	0.6	1.0	0.99
33	2012	dCS1	5972	104.4	103.8	8.2	8.5	0.6	1.1	0.99
34	2013	dCS1	5604	102.4	101.7	8.2	8.5	0.7	1.2	0.99
35	2014	dCS1	5230	102.5	101.9	8.4	8.7	0.5	1.4	0.99
36	2015	dCS1	4964	101.2	100.6	7.9	8.2	0.6	1.5	0.98
37	2016	dCS1	4794	102.3	101.9	8.3	8.6	0.4	1.5	0.99

RDC SS and traditional breeding value for nongenotyped females with phenotype

Obs	BYR	name	no	mean_ss	mean_e	std_ss	std_e	mean_dif	std_dif	corr_SS
38	2017	dCS1	3743	101.1	100.7	8.1	8.4	0.4	1.3	0.99
39	2018	dCS1	3322	100.4	100.3	7.7	8.0	0.2	1.4	0.99
40	2019	dCS1	3021	99.5	99.5	7.8	8.1	0.0	1.3	0.99
41	2020	dCS1	2379	99.5	99.6	7.9	8.2	-0.1	1.4	0.98
42	2021	dCS1	2358	100.0	100.3	7.5	7.8	-0.3	1.3	0.99
43	2022	dCS1	2751	100.5	101.0	7.2	7.5	-0.5	1.3	0.99
44	2023	dCS1	2473	100.4	101.2	6.6	6.8	-0.9	1.3	0.98
45	2024	dCS1	575	98.8	99.7	6.4	6.5	-1.0	1.5	0.97
46	2010	dSB2	47305	95.0	95.7	6.2	6.3	-0.7	0.9	0.99
47	2011	dSB2	44581	95.4	96.3	5.9	6.2	-0.9	1.0	0.99
48	2012	dSB2	41452	95.6	96.6	5.9	6.1	-1.0	1.0	0.99
49	2013	dSB2	40304	96.2	97.1	5.9	6.1	-1.0	1.1	0.98
50	2014	dSB2	38000	96.5	97.4	5.8	6.0	-0.9	1.1	0.98
51	2015	dSB2	34349	96.9	97.8	5.6	5.8	-0.9	1.1	0.98
52	2016	dSB2	29883	97.4	98.1	5.3	5.5	-0.7	1.1	0.98
53	2017	dSB2	24541	97.8	98.3	5.3	5.5	-0.5	1.1	0.98
54	2018	dSB2	21151	97.9	98.4	5.3	5.5	-0.5	1.1	0.98
55	2019	dSB2	18223	98.0	98.3	4.9	5.1	-0.4	1.1	0.98
56	2020	dSB2	15836	98.8	98.9	5.0	5.1	0.0	1.1	0.98
57	2021	dSB2	14194	99.1	98.9	4.5	4.6	0.3	1.1	0.97
58	2022	dSB2	11579	99.4	99.0	4.7	4.8	0.4	1.1	0.97
59	2023	dSB2	10290	100.1	99.5	4.3	4.3	0.6	1.2	0.96
60	2024	dSB2	2216	100.2	99.1	4.4	4.5	1.1	1.4	0.95
61	2010	dCE2	28782	96.0	96.9	7.3	7.5	-0.9	1.0	0.99
62	2011	dCE2	27478	96.2	97.2	6.6	6.9	-1.0	1.1	0.99
63	2012	dCE2	26282	96.1	97.1	6.9	7.1	-1.0	1.1	0.99
64	2013	dCE2	25539	96.6	97.6	7.1	7.3	-0.9	1.1	0.99
65	2014	dCE2	24510	97.1	98.0	6.5	6.7	-0.9	1.3	0.98
66	2015	dCE2	22232	97.3	98.1	6.6	6.8	-0.7	1.4	0.98
67	2016	dCE2	19987	97.2	97.8	6.5	6.6	-0.6	1.3	0.98
68	2017	dCE2	16663	98.0	98.5	5.9	6.0	-0.5	1.3	0.98
69	2018	dCE2	14505	98.0	98.3	5.9	6.0	-0.3	1.2	0.98
70	2019	dCE2	12695	98.6	98.8	5.6	5.7	-0.2	1.2	0.98
71	2020	dCE2	10981	98.8	98.9	6.2	6.3	-0.1	1.2	0.98
72	2021	dCE2	9991	99.5	99.4	5.4	5.5	0.1	1.2	0.97
73	2022	dCE2	8203	99.4	99.0	5.2	5.3	0.4	1.3	0.97
74	2023	dCE2	7170	100.0	99.4	4.7	4.7	0.6	1.3	0.96

RDC SS and traditional breeding value for nongenotyped females with phenotype

Obs	BYR	name	no	mean_ss	mean_e	std_ss	std_e	mean_dif	std_dif	corr_SS
75	2024	dCE2	1617	100.9	100.3	4.6	4.6	0.7	1.5	0.94
76	2010	dCS2	9085	110.4	109.2	8.4	8.7	1.1	1.0	0.99
77	2011	dCS2	8811	108.1	106.9	8.6	8.9	1.2	1.0	0.99
78	2012	dCS2	8362	108.3	107.1	9.0	9.4	1.2	1.1	0.99
79	2013	dCS2	7804	106.9	105.7	9.1	9.5	1.2	1.2	0.99
80	2014	dCS2	7437	105.7	104.5	8.9	9.1	1.2	1.4	0.99
81	2015	dCS2	6407	106.0	104.9	9.0	9.2	1.1	1.4	0.99
82	2016	dCS2	5659	105.0	104.1	8.7	8.9	1.0	1.4	0.99
83	2017	dCS2	4544	103.3	102.6	8.7	9.0	0.7	1.4	0.99
84	2018	dCS2	4254	102.5	102.1	8.7	9.0	0.4	1.4	0.99
85	2019	dCS2	3844	102.6	102.4	9.0	9.1	0.2	1.4	0.99
86	2020	dCS2	3140	101.0	100.9	8.3	8.5	0.1	1.4	0.99
87	2021	dCS2	3262	101.1	101.2	7.8	8.0	-0.1	1.5	0.98
88	2022	dCS2	2754	101.1	101.5	8.0	8.2	-0.5	1.4	0.98
89	2023	dCS2	2499	99.4	100.1	7.3	7.4	-0.8	1.5	0.98
90	2024	dCS2	545	98.5	99.2	8.3	8.4	-0.7	1.7	0.98
91	2010	mSB1	50322	92.7	93.2	7.0	7.0	-0.5	1.0	0.99
92	2011	mSB1	48844	94.2	94.6	6.4	6.4	-0.5	1.1	0.98
93	2012	mSB1	44486	95.1	95.6	6.2	6.3	-0.4	1.3	0.98
94	2013	mSB1	41898	95.6	96.1	5.7	5.7	-0.4	1.4	0.97
95	2014	mSB1	37974	95.5	95.8	5.8	5.8	-0.3	1.5	0.97
96	2015	mSB1	32671	97.0	97.4	5.5	5.5	-0.3	1.6	0.96
97	2016	mSB1	27490	97.8	98.0	5.7	5.7	-0.2	1.5	0.96
98	2017	mSB1	22158	97.3	97.4	5.8	5.8	-0.2	1.5	0.97
99	2018	mSB1	18417	98.2	98.2	5.7	5.7	0.0	1.5	0.97
100	2019	mSB1	15348	98.2	98.1	5.3	5.3	0.1	1.5	0.96
101	2020	mSB1	13706	99.2	99.3	5.3	5.3	-0.1	1.4	0.96
102	2021	mSB1	10497	99.4	99.2	5.7	5.7	0.1	1.4	0.97
103	2022	mSB1	1312	99.5	99.3	5.6	5.5	0.2	1.8	0.95
104	2010	mCE1	36013	89.1	89.8	7.6	7.7	-0.7	1.1	0.99
105	2011	mCE1	33767	90.6	91.4	7.0	7.2	-0.8	1.2	0.99
106	2012	mCE1	30998	92.1	93.0	7.0	7.2	-0.8	1.3	0.98
107	2013	mCE1	29006	92.5	93.2	6.6	6.7	-0.7	1.4	0.98
108	2014	mCE1	27386	93.5	94.2	6.8	6.8	-0.6	1.5	0.98
109	2015	mCE1	24069	94.7	95.2	6.7	6.8	-0.5	1.6	0.97
110	2016	mCE1	20212	96.6	97.1	6.5	6.6	-0.5	1.6	0.97
111	2017	mCE1	15957	95.5	95.8	6.0	6.1	-0.2	1.5	0.97

RDC SS and traditional breeding value for nongenotyped females with phenotype

Obs	BYR	name	no	mean_ss	mean_e	std_ss	std_e	mean_dif	std_dif	corr_SS
112	2018	mCE1	12958	97.3	97.6	6.8	6.8	-0.2	1.5	0.97
113	2019	mCE1	10919	97.5	97.6	6.2	6.2	-0.1	1.5	0.97
114	2020	mCE1	9776	98.6	98.6	6.2	6.2	0.0	1.5	0.97
115	2021	mCE1	7462	98.9	98.8	6.0	5.9	0.2	1.5	0.97
116	2022	mCE1	959	99.5	99.3	5.3	5.2	0.2	1.5	0.96
117	2010	mCS1	11021	99.9	100.9	9.3	9.5	-0.9	1.2	0.99
118	2011	mCS1	10657	101.7	102.5	9.0	9.1	-0.9	1.4	0.99
119	2012	mCS1	9924	100.6	101.5	9.4	9.6	-0.9	1.6	0.99
120	2013	mCS1	9120	100.0	101.0	9.3	9.5	-1.0	1.5	0.99
121	2014	mCS1	8669	99.7	100.4	8.3	8.4	-0.7	1.7	0.98
122	2015	mCS1	7435	100.5	101.1	9.4	9.5	-0.6	1.9	0.98
123	2016	mCS1	6645	98.3	98.4	8.4	8.6	0.0	1.9	0.98
124	2017	mCS1	5127	100.4	100.2	8.4	8.7	0.1	1.7	0.98
125	2018	mCS1	4066	99.7	99.7	9.8	9.8	0.0	1.8	0.98
126	2019	mCS1	3500	100.9	100.4	8.5	8.6	0.6	1.8	0.98
127	2020	mCS1	3539	99.9	99.9	7.5	7.7	0.1	1.9	0.97
128	2021	mCS1	2914	102.9	102.6	7.5	7.6	0.4	1.8	0.97
129	2022	mCS1	385	99.3	98.5	8.3	8.3	0.8	2.0	0.97
130	2010	mSB2	38827	97.8	97.6	7.1	7.2	0.2	1.2	0.99
131	2011	mSB2	37153	98.7	98.5	6.5	6.6	0.2	1.3	0.98
132	2012	mSB2	33423	99.7	99.6	6.1	6.3	0.1	1.4	0.97
133	2013	mSB2	30088	100.1	100.1	5.8	5.8	0.0	1.5	0.96
134	2014	mSB2	26894	99.9	99.8	6.1	6.1	0.1	1.6	0.96
135	2015	mSB2	23314	100.8	100.7	5.9	5.9	0.0	1.7	0.96
136	2016	mSB2	19594	100.8	100.7	5.7	5.7	0.0	1.7	0.96
137	2017	mSB2	15846	100.3	100.3	5.7	5.8	0.0	1.7	0.96
138	2018	mSB2	13154	100.3	100.3	5.6	5.6	0.1	1.6	0.96
139	2019	mSB2	10191	100.4	100.3	5.3	5.3	0.1	1.7	0.95
140	2020	mSB2	7570	100.4	100.4	5.3	5.3	-0.1	1.7	0.95
141	2021	mSB2	825	100.2	100.1	5.5	5.3	0.2	1.9	0.94
142	2022	mSB2	1	.	.	.	.	.	.	.
143	2010	mCE2	26938	91.3	91.9	7.9	8.0	-0.6	1.1	0.99
144	2011	mCE2	26224	92.5	93.1	7.0	7.1	-0.6	1.2	0.99
145	2012	mCE2	24156	94.1	94.7	6.8	7.0	-0.6	1.3	0.98
146	2013	mCE2	22543	94.4	94.9	6.6	6.7	-0.6	1.4	0.98
147	2014	mCE2	20336	95.1	95.6	6.5	6.6	-0.5	1.6	0.97
148	2015	mCE2	17687	96.5	97.1	6.3	6.4	-0.5	1.6	0.97

RDC SS and traditional breeding value for nongenotyped females with phenotype

Obs	BYR	name	no	mean_ss	mean_e	std_ss	std_e	mean_dif	std_dif	corr_SS
149	2016	mCE2	14876	97.4	97.7	6.0	6.0	-0.3	1.6	0.97
150	2017	mCE2	11659	97.2	97.4	5.7	5.8	-0.2	1.5	0.96
151	2018	mCE2	9564	98.8	98.9	6.1	6.2	-0.1	1.5	0.97
152	2019	mCE2	7352	98.5	98.5	5.5	5.6	-0.1	1.5	0.96
153	2020	mCE2	5327	99.4	99.5	5.2	5.2	-0.1	1.5	0.96
154	2021	mCE2	579	100.1	99.9	4.5	4.3	0.2	1.7	0.92
155	2022	mCE2	1	.	.	.	.	.	.	.
156	2010	mCS2	8122	102.8	104.3	7.6	8.3	-1.5	1.3	0.99
157	2011	mCS2	7876	103.0	104.4	7.9	8.6	-1.4	1.5	0.99
158	2012	mCS2	7018	101.6	102.9	8.2	9.0	-1.3	1.6	0.99
159	2013	mCS2	6325	102.1	103.6	7.2	7.8	-1.5	1.5	0.98
160	2014	mCS2	5747	101.5	102.8	6.8	7.4	-1.2	1.7	0.98
161	2015	mCS2	5341	101.4	102.5	7.4	8.1	-1.1	1.8	0.98
162	2016	mCS2	4578	100.2	100.8	7.4	7.9	-0.6	1.8	0.98
163	2017	mCS2	3410	100.2	100.6	7.6	8.1	-0.4	1.9	0.97
164	2018	mCS2	2868	100.2	100.7	8.2	8.6	-0.5	1.7	0.98
165	2019	mCS2	2237	101.8	102.0	7.2	7.6	-0.3	1.8	0.97
166	2020	mCS2	1788	101.7	101.6	6.4	6.6	0.1	1.9	0.96
167	2021	mCS2	217	104.9	104.9	7.8	8.0	-0.1	1.6	0.98
168	2022	mCS2	1	.	.	.	.	.	.	.
169	2010	brth	28912	95.4	96.1	6.1	6.3	-0.7	0.9	0.99
170	2011	brth	27938	96.0	96.9	5.9	6.1	-0.9	1.0	0.99
171	2012	brth	25957	95.6	96.7	6.0	6.2	-1.0	1.0	0.99
172	2013	brth	25507	96.1	97.1	5.7	5.9	-1.1	1.1	0.98
173	2014	brth	23714	96.4	97.4	5.6	5.8	-1.0	1.2	0.98
174	2015	brth	21585	97.4	98.4	5.6	5.8	-0.9	1.2	0.98
175	2016	brth	18680	97.7	98.4	5.4	5.6	-0.7	1.2	0.98
176	2017	brth	15483	98.2	98.7	5.3	5.4	-0.4	1.1	0.98
177	2018	brth	13191	98.8	99.2	5.2	5.4	-0.4	1.2	0.98
178	2019	brth	11482	99.0	99.2	5.2	5.3	-0.2	1.2	0.98
179	2020	brth	9873	99.8	99.6	5.3	5.4	0.1	1.1	0.98
180	2021	brth	8383	99.5	99.1	4.9	5.0	0.4	1.2	0.97
181	2022	brth	7888	99.9	99.2	5.1	5.3	0.7	1.2	0.98
182	2023	brth	6766	100.5	99.5	4.3	4.3	1.0	1.2	0.96
183	2024	brth	1567	101.3	100.0	4.1	4.2	1.3	1.3	0.95
184	2010	calv	50322	93.7	93.9	7.2	7.2	-0.3	1.0	0.99
185	2011	calv	48844	95.0	95.3	6.6	6.6	-0.3	1.1	0.99

RDC SS and traditional breeding value for nongenotyped females with phenotype

Obs	BYR	name	no	mean_ss	mean_e	std_ss	std_e	mean_dif	std_dif	corr_SS
186	2012	calv	44486	96.3	96.6	6.3	6.4	-0.3	1.3	0.98
187	2013	calv	41898	96.8	97.1	5.7	5.7	-0.3	1.4	0.97
188	2014	calv	37974	96.7	96.9	5.8	5.8	-0.2	1.4	0.97
189	2015	calv	32671	98.1	98.3	5.7	5.7	-0.2	1.5	0.96
190	2016	calv	27490	98.7	98.8	5.7	5.6	-0.1	1.5	0.97
191	2017	calv	22158	98.1	98.3	5.6	5.6	-0.1	1.5	0.97
192	2018	calv	18417	98.8	98.8	5.6	5.5	0.0	1.5	0.97
193	2019	calv	15348	98.8	98.7	5.2	5.2	0.1	1.5	0.96
194	2020	calv	13706	99.4	99.5	5.2	5.1	-0.1	1.5	0.96
195	2021	calv	10497	99.7	99.4	5.3	5.3	0.2	1.6	0.96
196	2022	calv	1312	100.0	99.9	5.4	5.3	0.1	1.8	0.94

RDC SS and traditional breeding value for nongenotyped females with phenotype

Obs	diff	d_brth	d_calv	p_brth	p_calv
1	-16	.	.	.	.
2	-14	.	.	.	.
3	-13	.	1	.	0
4	-12	.	1	.	0
5	-11	.	3	.	0
6	-10	6	9	0	0
7	-9	22	18	0	0
8	-8	41	69	0	0
9	-7	144	202	0	0
10	-6	254	547	0	0
11	-5	454	1467	0	0
12	-4	1349	3317	1	1
13	-3	5061	8191	2	2
14	-2	37110	22877	15	6
15	-1	105956	95469	43	26
16	0	62471	157069	25	43
17	1	22572	48379	9	13
18	2	6979	15908	3	4
19	3	2637	6588	1	2
20	4	1178	2896	0	1
21	5	464	1259	0	0
22	6	148	508	0	0
23	7	50	207	0	0
24	8	16	94	0	0
25	9	5	28	0	0
26	10	4	9	0	0
27	11	4	5	0	0
28	12	.	.	.	.
29	13	.	1	.	0
30	14	.	1	.	0
31	15	.	.	.	.
32	18	1	.	0	.

RDC SS and traditional breeding value for nongenotyped females with phenotype

Obs	diff	d_dSB1	d_dCE1	d_dCS1	d_dSB2	d_dCE2	d_dCS2
1	-16	.	.	.	1	.	.
2	-14	.	.	.	1	.	.
3	-13	.	.	.	.	.	.
4	-12	.	.	.	.	.	.
5	-11	7	2	2	.	2	.
6	-10	17	1	3	2	7	3
7	-9	57	13	9	4	20	13
8	-8	122	23	13	20	48	32
9	-7	138	59	35	91	123	61
10	-6	163	195	103	280	336	121
11	-5	300	552	228	775	924	255
12	-4	1054	1258	481	2007	2377	456
13	-3	3707	3866	984	9660	7121	882
14	-2	22392	14628	2082	54203	31044	1822
15	-1	103089	73481	7179	167715	112003	5561
16	0	78363	57782	22296	111676	70233	15981
17	1	24878	16787	20892	32950	20668	34120
18	2	7812	4758	4098	9465	6642	14847
19	3	2830	2163	1116	3246	2684	2683
20	4	1211	1037	503	1169	1326	825
21	5	536	415	239	423	651	377
22	6	170	191	103	136	241	190
23	7	48	85	30	46	109	106
24	8	15	31	16	21	42	41
25	9	8	10	7	4	23	17
26	10	3	3	1	4	8	9
27	11	1	.	2	4	1	3
28	12	4	1	1	.	2	.
29	13	.	.	.	1	.	1
30	14	.	.	.	.	.	.
31	15	.	.	.	.	.	1
32	18	1	.	.	.	.	.

RDC SS and traditional breeding value for nongenotyped females with phenotype

Obs	diff	d_mSB1	d_mCE1	d_mCS1	d_mSB2	d_mCE2	d_mCS2
1	-16	.	.	.	.	.	.
2	-14	.	.	.	1	.	.
3	-13	.	.	2	.	.	.
4	-12	2	1	1	1	2	.
5	-11	8	6	6	.	3	1
6	-10	12	13	14	6	8	5
7	-9	35	36	23	22	20	16
8	-8	112	103	75	61	66	39
9	-7	258	291	166	174	176	129
10	-6	620	757	366	472	442	333
11	-5	1651	1729	747	1120	1191	815
12	-4	3893	3661	1579	2721	2760	2026
13	-3	9186	8611	3839	5839	6176	5294
14	-2	25464	27258	10934	14320	17042	13120
15	-1	116360	103073	28306	43107	67891	16199
16	0	139125	75553	19125	106963	61375	9667
17	1	42920	22744	10023	51997	17773	4582
18	2	14590	8720	4277	16750	6827	1960
19	3	5941	3915	1947	7381	3059	797
20	4	2807	1702	877	3285	1436	335
21	5	1274	743	399	1539	617	121
22	6	516	343	178	660	242	58
23	7	204	145	76	266	89	18
24	8	94	55	29	120	35	11
25	9	33	16	9	55	11	2
26	10	12	6	3	15	1	.
27	11	2	1	1	2	.	.
28	12	4	.	.	1	.	.
29	13	.	.	.	1	.	.
30	14	.	.	.	.	.	.
31	15	.	.	.	1	.	.
32	18	.	.	.	.	.	.

RDC SS and traditional breeding value for nongenotyped females with phenotype

Obs	diff	p_dSB1	p_dCE1	p_dCS1	p_dSB2	p_dCE2	p_dCS2
1	-16	.	.	.	0	.	.
2	-14	.	.	.	0	.	.
3	-13	.	.	.	.	.	.
4	-12	.	.	.	.	.	.
5	-11	0	0	0	.	0	.
6	-10	0	0	0	0	0	0
7	-9	0	0	0	0	0	0
8	-8	0	0	0	0	0	0
9	-7	0	0	0	0	0	0
10	-6	0	0	0	0	0	0
11	-5	0	0	0	0	0	0
12	-4	0	1	1	1	1	1
13	-3	2	2	2	2	3	1
14	-2	9	8	3	14	12	2
15	-1	42	41	12	43	44	7
16	0	32	33	37	28	27	20
17	1	10	9	35	8	8	44
18	2	3	3	7	2	3	19
19	3	1	1	2	1	1	3
20	4	0	1	1	0	1	1
21	5	0	0	0	0	0	0
22	6	0	0	0	0	0	0
23	7	0	0	0	0	0	0
24	8	0	0	0	0	0	0
25	9	0	0	0	0	0	0
26	10	0	0	0	0	0	0
27	11	0	.	0	0	0	0
28	12	0	0	0	.	0	.
29	13	.	.	.	0	.	0
30	14	.	.	.	.	.	.
31	15	.	.	.	.	.	0
32	18	0	.	.	.	.	.

RDC SS and traditional breeding value for nongenotyped females with phenotype

Obs	diff	p_mSB1	p_mCE1	p_mCS1	p_mSB2	p_mCE2	p_mCS2
1	-16	.	.	.	.	.	.
2	-14	.	.	.	0	.	.
3	-13	.	.	0	.	.	.
4	-12	0	0	0	0	0	.
5	-11	0	0	0	.	0	0
6	-10	0	0	0	0	0	0
7	-9	0	0	0	0	0	0
8	-8	0	0	0	0	0	0
9	-7	0	0	0	0	0	0
10	-6	0	0	0	0	0	1
11	-5	0	1	1	0	1	1
12	-4	1	1	2	1	1	4
13	-3	3	3	5	2	3	10
14	-2	7	11	13	6	9	24
15	-1	32	40	34	17	36	29
16	0	38	29	23	42	33	17
17	1	12	9	12	20	9	8
18	2	4	3	5	7	4	4
19	3	2	2	2	3	2	1
20	4	1	1	1	1	1	1
21	5	0	0	0	1	0	0
22	6	0	0	0	0	0	0
23	7	0	0	0	0	0	0
24	8	0	0	0	0	0	0
25	9	0	0	0	0	0	0
26	10	0	0	0	0	0	.
27	11	0	0	0	0	.	.
28	12	0	.	.	0	.	.
29	13	.	.	.	0	.	.
30	14	.	.	.	.	.	.
31	15	.	.	.	0	.	.
32	18	.	.	.	.	.	.

RDC SS and traditional breeding value for nordic AI bulls with minimum 15 offspring

Obs	BYR	name	no	mean_noff	std_noff	mean_ss	mean_e	std_ss	std_e	mean_dif	std_dif	corr_SS
1	2010	dSB1	166	236	528	94.8	96.7	8.1	9.1	-1.9	2.1	0.98
2	2011	dSB1	168	316	648	97.2	98.7	8.0	8.8	-1.4	2.1	0.97
3	2012	dSB1	167	304	561	97.7	98.7	6.9	7.8	-1.0	1.9	0.97
4	2013	dSB1	118	409	709	98.3	99.2	7.2	8.0	-0.9	1.8	0.98
5	2014	dSB1	83	611	875	99.0	99.3	7.9	8.4	-0.2	1.4	0.99
6	2015	dSB1	69	660	846	100.8	100.4	5.8	6.5	0.4	1.5	0.98
7	2016	dSB1	69	603	787	100.8	100.7	6.7	7.5	0.1	1.6	0.98
8	2017	dSB1	66	632	786	100.2	99.9	6.1	6.6	0.3	1.6	0.97
9	2018	dSB1	52	697	981	100.8	99.7	5.4	5.7	1.2	1.4	0.97
10	2019	dSB1	48	562	619	102.5	101.2	7.9	8.7	1.3	1.5	0.99
11	2020	dSB1	52	579	676	103.7	101.9	6.5	7.4	1.8	1.7	0.98
12	2021	dSB1	36	301	288	103.6	102.2	5.6	6.4	1.4	1.9	0.96
13	2010	dCE1	165	185	408	97.5	98.6	9.8	10.1	-1.1	2.0	0.98
14	2011	dCE1	166	263	547	99.7	100.4	10.2	10.5	-0.7	2.0	0.98
15	2012	dCE1	166	246	459	99.3	100.1	9.5	9.6	-0.8	1.9	0.98
16	2013	dCE1	118	335	622	99.4	99.7	9.0	9.3	-0.3	2.0	0.98
17	2014	dCE1	83	511	760	99.8	99.7	10.2	10.1	0.1	1.5	0.99
18	2015	dCE1	69	543	739	100.9	100.9	8.0	8.2	0.0	1.9	0.97
19	2016	dCE1	69	506	675	102.0	101.7	7.9	8.2	0.3	1.5	0.98
20	2017	dCE1	66	525	661	101.3	100.7	8.3	8.7	0.7	1.7	0.98
21	2018	dCE1	52	591	855	102.9	102.1	7.4	7.1	0.8	1.7	0.97
22	2019	dCE1	48	462	525	103.0	102.0	8.5	8.5	1.0	1.4	0.99
23	2020	dCE1	52	486	566	102.3	101.1	6.9	6.8	1.2	1.6	0.97
24	2021	dCE1	36	259	241	104.1	102.9	6.7	6.3	1.2	2.0	0.96
25	2010	dCS1	44	107	181	105.7	104.7	12.8	13.1	1.0	1.9	0.99
26	2011	dCS1	46	84	128	101.6	100.3	11.6	11.9	1.3	2.0	0.99
27	2012	dCS1	59	121	200	101.6	100.8	12.4	12.9	0.8	1.9	0.99
28	2013	dCS1	48	174	249	100.8	100.8	11.0	11.3	0.0	1.8	0.99
29	2014	dCS1	32	270	295	99.8	98.9	12.7	13.5	0.8	1.4	1.00
30	2015	dCS1	35	262	285	98.1	97.8	11.4	11.3	0.3	1.4	0.99
31	2016	dCS1	33	227	241	98.2	98.0	10.2	10.5	0.2	1.9	0.98
32	2017	dCS1	36	240	279	99.3	99.8	11.0	11.1	-0.4	1.7	0.99
33	2018	dCS1	27	203	275	95.7	96.1	10.4	11.0	-0.4	1.0	1.00
34	2019	dCS1	29	196	226	98.8	99.8	10.6	10.8	-1.0	2.4	0.97
35	2020	dCS1	26	218	198	98.5	100.2	11.2	11.3	-1.7	1.0	1.00
36	2021	dCS1	20	146	120	96.7	98.5	10.1	10.4	-1.8	2.0	0.98
37	2010	dSB2	165	390	779	93.7	96.0	7.7	8.4	-2.3	1.9	0.98

RDC SS and traditional breeding value for nordic AI bulls with minimum 15 offspring

Obs	BYR	name	no	mean_noff	std_noff	mean_ss	mean_e	std_ss	std_e	mean_dif	std_dif	corr_SS
38	2011	dSB2	168	547	1134	98.0	99.7	7.9	8.8	-1.8	2.2	0.97
39	2012	dSB2	169	515	880	97.3	98.6	7.0	7.9	-1.3	1.9	0.97
40	2013	dSB2	121	684	1100	97.3	98.3	8.5	9.4	-1.1	2.1	0.98
41	2014	dSB2	83	1024	1346	99.2	99.5	6.2	7.1	-0.2	1.6	0.98
42	2015	dSB2	69	1053	1166	99.7	99.4	7.0	7.6	0.2	1.7	0.98
43	2016	dSB2	70	1055	1477	100.1	100.1	7.2	7.9	0.0	1.7	0.98
44	2017	dSB2	66	1058	1358	100.6	100.0	6.6	6.8	0.6	1.6	0.97
45	2018	dSB2	52	1217	1597	101.6	100.1	5.2	5.2	1.5	1.1	0.98
46	2019	dSB2	50	877	948	101.9	100.4	6.9	7.5	1.5	1.9	0.97
47	2020	dSB2	52	895	1021	103.7	102.3	5.8	6.2	1.4	1.6	0.97
48	2021	dSB2	42	408	466	102.7	100.4	5.9	6.9	2.3	2.1	0.96
49	2010	dCE2	165	286	575	96.4	97.9	10.1	10.3	-1.5	2.4	0.97
50	2011	dCE2	168	433	948	99.8	100.8	9.9	10.1	-1.0	2.0	0.98
51	2012	dCE2	168	398	696	98.7	99.5	9.5	10.0	-0.8	2.4	0.97
52	2013	dCE2	121	537	922	98.3	98.7	10.2	10.5	-0.4	1.9	0.98
53	2014	dCE2	83	837	1153	99.3	99.2	8.6	9.0	0.1	1.8	0.98
54	2015	dCE2	69	830	966	100.9	100.7	8.0	8.1	0.2	1.6	0.98
55	2016	dCE2	70	874	1238	100.9	100.4	7.7	8.1	0.5	1.8	0.98
56	2017	dCE2	66	862	1123	101.9	101.1	7.8	8.2	0.8	1.8	0.98
57	2018	dCE2	52	1022	1362	102.7	101.6	7.6	7.6	1.1	1.4	0.98
58	2019	dCE2	50	707	787	103.0	101.9	6.9	7.0	1.1	2.0	0.96
59	2020	dCE2	52	735	827	102.6	101.2	6.8	6.8	1.5	1.6	0.97
60	2021	dCE2	40	357	377	103.8	102.2	6.2	6.0	1.6	2.0	0.94
61	2010	dCS2	44	201	268	108.3	106.6	14.1	14.7	1.8	1.5	1.00
62	2011	dCS2	58	146	169	103.0	101.1	13.0	13.4	1.9	1.9	0.99
63	2012	dCS2	66	191	258	103.3	101.8	13.3	13.5	1.5	1.7	0.99
64	2013	dCS2	56	218	283	101.2	99.9	11.5	11.5	1.3	1.9	0.99
65	2014	dCS2	43	283	308	100.3	99.4	11.5	11.9	0.8	2.4	0.98
66	2015	dCS2	43	292	337	99.1	99.1	10.8	10.8	0.0	1.5	0.99
67	2016	dCS2	40	318	348	99.4	99.8	13.3	13.4	-0.4	2.1	0.99
68	2017	dCS2	44	275	300	99.5	100.5	10.7	10.8	-0.9	1.9	0.99
69	2018	dCS2	39	238	237	97.4	98.1	11.1	11.6	-0.7	2.2	0.98
70	2019	dCS2	35	252	239	96.4	98.0	11.8	11.7	-1.7	2.3	0.98
71	2020	dCS2	31	233	216	96.4	98.2	11.2	11.2	-1.7	1.4	0.99
72	2021	dCS2	22	178	141	95.6	97.5	12.5	12.3	-1.9	1.5	0.99
73	2010	mSB1	165	210	497	97.1	97.8	9.4	10.1	-0.8	3.5	0.94
74	2011	mSB1	168	236	492	96.3	96.5	8.6	8.6	-0.3	3.2	0.93

RDC SS and traditional breeding value for nordic AI bulls with minimum 15 offspring

Obs	BYR	name	no	mean_noff	std_noff	mean_ss	mean_e	std_ss	std_e	mean_dif	std_dif	corr_SS
75	2012	mSB1	169	231	413	98.7	98.6	7.3	7.6	0.1	3.0	0.92
76	2013	mSB1	122	320	532	99.0	99.5	7.3	7.5	-0.6	3.3	0.90
77	2014	mSB1	84	483	700	98.1	98.0	9.0	9.1	0.1	2.6	0.96
78	2015	mSB1	71	519	630	98.3	98.1	8.4	8.5	0.1	2.1	0.97
79	2016	mSB1	70	489	709	98.7	98.2	8.8	8.3	0.5	2.7	0.95
80	2017	mSB1	66	527	750	99.0	99.2	7.2	7.4	-0.2	2.5	0.94
81	2018	mSB1	52	499	715	99.8	99.8	8.2	7.8	0.0	2.4	0.96
82	2019	mSB1	46	221	278	101.5	100.4	9.1	9.3	1.1	3.6	0.92
83	2010	mCE1	165	169	399	95.4	96.3	9.3	9.9	-0.9	3.3	0.94
84	2011	mCE1	168	194	418	95.3	95.8	9.1	9.2	-0.4	3.0	0.95
85	2012	mCE1	169	189	343	98.9	99.0	8.9	9.2	-0.1	2.8	0.95
86	2013	mCE1	121	270	465	98.5	98.5	8.7	8.8	0.0	2.8	0.95
87	2014	mCE1	84	406	604	99.7	99.5	7.4	8.1	0.2	2.6	0.95
88	2015	mCE1	71	430	538	97.9	97.3	8.9	9.2	0.6	2.0	0.98
89	2016	mCE1	70	407	593	99.6	99.2	8.4	8.2	0.3	2.4	0.96
90	2017	mCE1	66	439	630	99.8	99.6	7.6	7.8	0.2	2.3	0.96
91	2018	mCE1	52	417	607	100.8	100.1	7.7	7.6	0.7	2.8	0.94
92	2019	mCE1	46	188	240	102.2	100.7	7.8	7.6	1.5	3.3	0.91
93	2010	mCS1	44	114	171	98.4	98.7	13.3	14.0	-0.3	4.3	0.95
94	2011	mCS1	49	86	102	101.2	101.9	11.6	11.4	-0.7	2.9	0.97
95	2012	mCS1	60	109	152	101.3	101.2	14.1	13.8	0.2	3.2	0.97
96	2013	mCS1	48	146	193	101.3	101.2	11.2	11.7	0.1	3.4	0.96
97	2014	mCS1	33	219	229	98.0	97.6	12.0	12.8	0.5	3.4	0.97
98	2015	mCS1	36	199	206	99.2	98.9	12.5	13.1	0.2	2.7	0.98
99	2016	mCS1	32	196	195	102.7	102.3	13.0	13.5	0.4	3.3	0.97
100	2017	mCS1	36	189	204	99.6	99.1	11.6	11.7	0.6	2.6	0.98
101	2018	mCS1	33	160	190	103.2	103.4	11.3	10.5	-0.2	3.2	0.96
102	2019	mCS1	21	115	105	102.4	101.0	11.3	12.1	1.4	3.5	0.96
103	2010	mSB2	165	155	385	101.8	102.1	8.5	9.7	-0.3	3.8	0.92
104	2011	mSB2	166	179	382	100.3	100.2	7.6	8.4	0.1	3.8	0.89
105	2012	mSB2	169	174	322	101.5	101.3	7.4	8.0	0.2	3.4	0.91
106	2013	mSB2	121	246	412	102.9	103.1	7.6	7.4	-0.2	3.2	0.91
107	2014	mSB2	84	362	519	101.3	101.5	7.9	8.2	-0.3	2.9	0.93
108	2015	mSB2	71	388	482	100.5	100.2	8.6	9.4	0.4	3.2	0.94
109	2016	mSB2	70	340	499	101.0	100.8	8.2	8.5	0.2	3.1	0.93
110	2017	mSB2	66	323	460	100.5	100.8	7.4	7.8	-0.3	3.2	0.91
111	2018	mSB2	38	177	245	100.2	99.8	9.0	7.7	0.4	3.4	0.93

RDC SS and traditional breeding value for nordic AI bulls with minimum 15 offspring

Obs	BYR	name	no	mean_noff	std_noff	mean_ss	mean_e	std_ss	std_e	mean_dif	std_dif	corr_SS
112	2010	mCE2	165	128	328	97.5	98.2	8.9	9.2	-0.7	3.3	0.93
113	2011	mCE2	166	152	335	98.3	98.6	8.2	8.7	-0.3	2.9	0.94
114	2012	mCE2	168	147	275	100.4	100.7	7.6	8.0	-0.3	3.2	0.92
115	2013	mCE2	117	221	376	100.0	99.9	7.3	7.1	0.0	2.8	0.92
116	2014	mCE2	83	315	456	100.8	100.8	5.4	5.9	0.0	2.2	0.93
117	2015	mCE2	71	329	421	100.4	99.7	7.8	8.3	0.7	2.3	0.96
118	2016	mCE2	70	288	424	100.9	100.2	7.2	7.3	0.7	2.4	0.94
119	2017	mCE2	66	269	386	100.5	100.7	5.5	5.2	-0.2	2.5	0.89
120	2018	mCE2	38	149	207	101.9	101.7	6.1	6.2	0.3	2.6	0.91
121	2010	mCS2	42	85	134	97.9	98.6	8.8	9.2	-0.8	3.3	0.93
122	2011	mCS2	44	65	72	100.4	101.7	10.5	11.1	-1.2	2.2	0.98
123	2012	mCS2	57	82	114	100.3	100.3	9.9	10.7	0.0	3.0	0.96
124	2013	mCS2	44	115	144	101.3	101.8	9.1	9.9	-0.5	3.0	0.95
125	2014	mCS2	29	165	152	97.1	96.5	11.2	12.5	0.6	2.5	0.98
126	2015	mCS2	32	144	126	98.3	98.2	10.5	11.0	0.2	2.4	0.98
127	2016	mCS2	29	147	138	100.4	101.0	12.6	13.3	-0.5	2.4	0.98
128	2017	mCS2	28	140	127	101.0	100.6	7.5	7.7	0.4	3.1	0.92
129	2018	mCS2	20	72	79	103.6	103.4	10.8	10.5	0.2	2.6	0.97
130	2010	brth	166	236	528	94.1	96.3	8.0	8.8	-2.2	1.9	0.98
131	2011	brth	168	316	648	97.6	99.3	8.1	9.0	-1.8	2.1	0.98
132	2012	brth	167	304	561	97.4	98.7	7.1	8.0	-1.3	1.8	0.98
133	2013	brth	118	409	709	97.9	98.9	7.9	8.9	-1.0	1.9	0.98
134	2014	brth	83	611	875	99.1	99.3	7.2	7.8	-0.2	1.3	0.99
135	2015	brth	69	660	846	100.4	100.1	6.2	6.8	0.3	1.4	0.98
136	2016	brth	69	603	787	100.7	100.6	6.9	7.7	0.1	1.6	0.98
137	2017	brth	66	632	786	100.5	100.0	6.5	6.7	0.5	1.4	0.98
138	2018	brth	52	697	981	101.4	100.1	5.1	5.4	1.3	1.1	0.98
139	2019	brth	48	562	619	102.5	101.0	7.5	8.2	1.4	1.6	0.98
140	2020	brth	52	579	676	103.9	102.2	6.1	6.8	1.8	1.5	0.98
141	2021	brth	36	301	288	103.4	101.6	5.8	6.5	1.8	1.7	0.97
142	2010	calv	165	210	497	98.7	99.4	8.9	9.8	-0.6	3.4	0.94
143	2011	calv	168	236	492	97.6	97.8	7.9	8.3	-0.2	3.1	0.93
144	2012	calv	169	231	413	99.8	99.7	7.2	7.7	0.1	2.9	0.93
145	2013	calv	122	320	532	100.6	101.0	7.1	7.2	-0.3	3.0	0.91
146	2014	calv	84	483	700	99.5	99.5	8.0	8.4	0.0	2.6	0.95
147	2015	calv	71	519	630	99.1	98.8	8.6	9.0	0.4	2.5	0.96
148	2016	calv	70	489	709	99.7	99.2	8.2	8.0	0.4	2.6	0.95

RDC SS and traditional breeding value for nordic AI bulls with minimum 15 offspring

Obs	BYR	name	no	mean_noff	std_noff	mean_ss	mean_e	std_ss	std_e	mean_dif	std_dif	corr_SS
149	2017	calv	66	527	750	99.6	99.9	7.1	7.4	-0.3	2.7	0.93
150	2018	calv	52	499	715	100.2	99.8	7.7	7.2	0.5	2.5	0.95
151	2019	calv	46	221	278	101.9	100.7	8.3	8.9	1.3	3.9	0.90

RDC SS and traditional breeding value for nordic AI bulls with minimum 15 offspring

Obs	diff	d_brth	d_calv	p_brth	p_calv
1	-14	.	1	.	0
2	-12	.	.	.	.
3	-11	.	1	.	0
4	-10	.	1	.	0
5	-9	.	2	.	0
6	-8	1	10	0	1
7	-7	5	9	0	1
8	-6	8	15	1	1
9	-5	25	26	2	3
10	-4	53	43	5	4
11	-3	93	77	8	8
12	-2	176	96	16	9
13	-1	200	141	18	14
14	0	210	183	19	18
15	1	153	133	14	13
16	2	99	102	9	10
17	3	40	61	4	6
18	4	21	42	2	4
19	5	8	36	1	4
20	6	2	19	0	2
21	7	.	9	.	1
22	8	1	4	0	0
23	9	.	1	.	0
24	10	.	2	.	0
25	11	.	1	.	0
26	13	.	.	.	.

RDC SS and traditional breeding value for nordic AI bulls with minimum 15 offspring

Obs	diff	d_dSB1	d_dCE1	d_dCS1	d_dSB2	d_dCE2	d_dCS2
1	-14	.	.	.	.	.	.
2	-12	.	.	.	.	.	.
3	-11	.	.	.	.	.	.
4	-10	.	.	.	.	.	.
5	-9	.	.	.	1	1	1
6	-8	2	.	1	1	.	1
7	-7	2	1	1	4	4	2
8	-6	7	6	2	15	10	2
9	-5	22	15	4	24	21	6
10	-4	54	38	4	69	41	9
11	-3	78	68	23	103	82	21
12	-2	155	111	44	166	120	53
13	-1	246	203	71	182	182	92
14	0	197	271	103	192	253	92
15	1	151	202	89	169	170	107
16	2	96	81	50	89	113	63
17	3	53	62	24	48	64	33
18	4	21	19	13	29	27	17
19	5	5	8	5	10	10	13
20	6	2	2	2	4	3	7
21	7	4	4	.	1	1	2
22	8	.	.	.	1	3	.
23	9	.	.	.	1	.	.
24	10	.	.	.	.	1	1
25	11	.	.	.	.	.	.
26	13	.	.	.	.	.	.

RDC SS and traditional breeding value for nordic AI bulls with minimum 15 offspring

Obs	diff	d_mSB1	d_mCE1	d_mCS1	d_mSB2	d_mCE2	d_mCS2
1	-14	1	.	.	1	.	.
2	-12	.	.	2	2	1	.
3	-11	1	.	.	3	.	.
4	-10	4	1	1	.	1	.
5	-9	6	2	1	.	1	3
6	-8	4	4	1	12	5	1
7	-7	11	8	4	14	8	4
8	-6	17	17	13	21	11	5
9	-5	26	35	12	28	31	9
10	-4	46	45	16	47	49	15
11	-3	58	65	20	59	72	26
12	-2	110	94	35	99	80	30
13	-1	151	162	56	142	143	52
14	0	183	181	48	130	182	51
15	1	136	138	57	104	116	50
16	2	105	76	43	84	98	37
17	3	57	75	36	68	56	20
18	4	38	48	18	45	37	11
19	5	22	27	11	41	27	3
20	6	13	17	11	22	14	5
21	7	12	11	2	13	6	3
22	8	7	4	1	10	5	1
23	9	5	2	3	4	1	.
24	10	.	.	2	3	1	.
25	11	1	1	.	.	.	.
26	13	1	.	.	.	.	.

RDC SS and traditional breeding value for nordic AI bulls with minimum 15 offspring

Obs	diff	p_dSB1	p_dCE1	p_dCS1	p_dSB2	p_dCE2	p_dCS2
1	-14	.	.	.	.	.	.
2	-12	.	.	.	.	.	.
3	-11	.	.	.	.	.	.
4	-10	.	.	.	.	.	.
5	-9	.	.	.	0	0	0
6	-8	0	.	0	0	.	0
7	-7	0	0	0	0	0	0
8	-6	1	1	0	1	1	0
9	-5	2	1	1	2	2	1
10	-4	5	3	1	6	4	2
11	-3	7	6	5	9	7	4
12	-2	14	10	10	15	11	10
13	-1	22	19	16	16	16	18
14	0	18	25	24	17	23	18
15	1	14	19	20	15	15	20
16	2	9	7	11	8	10	12
17	3	5	6	6	4	6	6
18	4	2	2	3	3	2	3
19	5	0	1	1	1	1	2
20	6	0	0	0	0	0	1
21	7	0	0	.	0	0	0
22	8	.	.	.	0	0	.
23	9	.	.	.	0	.	.
24	10	.	.	.	.	0	0
25	11	.	.	.	.	.	.
26	13	.	.	.	.	.	.

RDC SS and traditional breeding value for nordic AI bulls with minimum 15 offspring

Obs	diff	p_mSB1	p_mCE1	p_mCS1	p_mSB2	p_mCE2	p_mCS2
1	-14	0	.	.	0	.	.
2	-12	.	.	1	0	0	.
3	-11	0	.	.	0	.	.
4	-10	0	0	0	.	0	.
5	-9	1	0	0	.	0	1
6	-8	0	0	0	1	1	0
7	-7	1	1	1	1	1	1
8	-6	2	2	3	2	1	2
9	-5	3	3	3	3	3	3
10	-4	5	4	4	5	5	5
11	-3	6	6	5	6	8	8
12	-2	11	9	9	10	8	9
13	-1	15	16	14	15	15	16
14	0	18	18	12	14	19	16
15	1	13	14	15	11	12	15
16	2	10	8	11	9	10	11
17	3	6	7	9	7	6	6
18	4	4	5	5	5	4	3
19	5	2	3	3	4	3	1
20	6	1	2	3	2	1	2
21	7	1	1	1	1	1	1
22	8	1	0	0	1	1	0
23	9	0	0	1	0	0	.
24	10	.	.	1	0	0	.
25	11	0	0	.	.	.	.
26	13	0	.	.	.	.	.

RDC SS and twostep breeding value for genotyped females without phenotype

Obs	BYR	name	no	mean_ss	mean_two	std_ss	std_two	mean_dif	std_dif	corr_SS
1	2019	brth	14312	100.7	99.3	5.2	6.4	1.5	3.8	0.80
2	2020	brth	15637	102.0	99.7	5.1	6.2	2.3	3.8	0.79
3	2021	brth	16304	102.0	99.3	4.9	6.0	2.6	3.7	0.79
4	2022	brth	16564	102.2	99.5	5.3	6.3	2.7	3.7	0.81
5	2023	brth	14536	102.8	100.0	4.8	5.9	2.8	3.7	0.78
6	2024	brth	1385	102.8	100.2	4.6	5.6	2.6	3.8	0.74
7	2019	calv	9123	99.4	100.9	6.0	4.5	-1.4	4.4	0.68
8	2020	calv	9967	100.1	101.7	6.1	4.5	-1.6	4.5	0.68
9	2021	calv	11658	100.3	101.7	6.4	4.4	-1.4	4.8	0.66
10	2022	calv	22842	101.7	102.5	6.1	4.3	-0.8	4.7	0.64
11	2023	calv	21466	100.9	102.2	5.5	4.2	-1.3	4.6	0.59
12	2024	calv	2094	100.8	102.3	5.6	4.1	-1.5	4.8	0.55

RDC SS and twostep breeding value for genotyped females without phenotype

Obs	diff	d_brth	d_calv	p_brth	p_calv
1	-52	1	.	0	.
2	-49	1	.	0	.
3	-39	1	.	0	.
4	-38	1	.	0	.
5	-32	1	.	0	.
6	-30	1	.	0	.
7	-28	1	.	0	.
8	-27	1	.	0	.
9	-25	1	.	0	.
10	-24	.	1	.	0
11	-23	1	1	0	0
12	-22	3	.	0	.
13	-21	1	.	0	.
14	-20	3	3	0	0
15	-19	6	8	0	0
16	-18	3	10	0	0
17	-17	6	25	0	0
18	-16	6	54	0	0
19	-15	3	103	0	0
20	-14	9	153	0	0
21	-13	5	264	0	0
22	-12	12	467	0	1
23	-11	30	745	0	1
24	-10	40	1162	0	2
25	-9	116	1650	0	2
26	-8	189	2212	0	3
27	-7	376	3022	0	4
28	-6	614	3829	1	5
29	-5	1121	4634	1	6
30	-4	1883	5325	2	7
31	-3	2840	6095	4	8
32	-2	4052	6559	5	9
33	-1	5520	6478	7	8
34	0	6773	6532	9	8
35	1	7838	6093	10	8
36	2	8488	5326	11	7
37	3	8398	4579	11	6

RDC SS and twostep breeding value for genotyped females without phenotype

Obs	diff	d_brth	d_calv	p_brth	p_calv
38	4	7712	3539	10	5
39	5	6626	2755	8	4
40	6	5390	2013	7	3
41	7	4027	1391	5	2
42	8	2723	897	3	1
43	9	1684	553	2	1
44	10	1072	295	1	0
45	11	615	200	1	0
46	12	302	90	0	0
47	13	132	43	0	0
48	14	63	24	0	0
49	15	29	11	0	0
50	16	12	6	0	0
51	17	5	2	0	0
52	18	.	1	.	0
53	20	1	.	0	.

RDC SS and twostep breeding value for genotyped females with phenotype

Obs	BYR	name	no	mean_ss	mean_two	std_ss	std_two	mean_dif	std_dif	corr_SS
1	2015	brth	4116	99.6	99.1	5.5	6.9	0.5	4.0	0.82
2	2016	brth	5587	99.8	99.2	5.4	6.8	0.6	4.0	0.81
3	2017	brth	6496	100.7	99.2	5.3	6.7	1.6	3.8	0.83
4	2018	brth	7263	101.5	99.9	4.8	6.2	1.5	3.8	0.80
5	2019	brth	7055	101.4	99.8	5.0	6.5	1.5	3.8	0.82
6	2020	brth	8074	102.7	100.4	4.8	6.2	2.3	3.6	0.81
7	2021	brth	7679	102.5	99.9	4.6	6.0	2.7	3.6	0.80
8	2022	brth	8172	102.6	99.6	5.2	6.2	3.0	3.5	0.82
9	2023	brth	6930	103.0	100.2	4.5	5.6	2.8	3.6	0.77
10	2024	brth	709	103.1	100.0	4.5	5.6	3.0	3.6	0.76
11	2015	calv	7369	99.4	99.2	6.4	5.2	0.2	4.5	0.72
12	2016	calv	10118	99.4	99.7	6.5	5.3	-0.3	4.6	0.72
13	2017	calv	11453	99.1	99.7	6.4	5.1	-0.6	4.5	0.71
14	2018	calv	12801	100.0	100.7	6.4	5.1	-0.7	4.5	0.71
15	2019	calv	12244	99.6	101.2	6.2	4.8	-1.6	4.6	0.67
16	2020	calv	13744	100.6	102.2	6.2	4.9	-1.6	4.7	0.67
17	2021	calv	12325	100.5	102.0	6.5	4.7	-1.5	4.9	0.65
18	2022	calv	1894	101.0	102.3	6.3	4.2	-1.4	5.0	0.62

RDC SS and twostep breeding value for genotyped females with phenotype

Obs	diff	d_brth	d_calv	p_brth	p_calv
1	-25	1	2	0	0
2	-23	1	.	0	.
3	-22	1	3	0	0
4	-21	3	8	0	0
5	-20	3	7	0	0
6	-19	2	17	0	0
7	-18	.	27	.	0
8	-17	2	52	0	0
9	-16	1	95	0	0
10	-15	2	122	0	0
11	-14	6	180	0	0
12	-13	11	335	0	0
13	-12	6	504	0	1
14	-11	41	755	0	1
15	-10	44	1108	0	1
16	-9	110	1477	0	2
17	-8	245	2193	0	3
18	-7	405	2841	1	3
19	-6	713	3693	1	5
20	-5	1173	4594	2	6
21	-4	1887	5299	3	6
22	-3	2743	6226	4	8
23	-2	3710	6822	6	8
24	-1	4658	6975	8	9
25	0	5734	7058	9	9
26	1	6230	6568	10	8
27	2	6609	6184	11	8
28	3	6275	5089	10	6
29	4	5806	4064	9	5
30	5	4771	3240	8	4
31	6	3746	2274	6	3
32	7	2758	1579	4	2
33	8	1846	1099	3	1
34	9	1113	635	2	1
35	10	668	403	1	0
36	11	375	216	1	0
37	12	222	101	0	0

RDC SS and twostep breeding value for genotyped females with phenotype

Obs	diff	d_brth	d_calv	p_brth	p_calv
38	13	95	53	0	0
39	14	41	31	0	0
40	15	15	10	0	0
41	16	5	7	0	0
42	17	2	1	0	0
43	18	2	1	0	0

RDC SS and twostep breeding value for nordic AI bulls with minimum 15 offspring

Obs	BYR	name	no	mean_noff	std_noff	mean_ss	mean_two	std_ss	std_two	mean_dif	std_dif	corr_SS
1	2010	brth	166	236	528	94.1	96.5	8.0	9.2	-2.4	2.7	0.96
2	2011	brth	168	316	648	97.6	99.4	8.1	9.3	-1.8	3.0	0.95
3	2012	brth	167	304	561	97.4	98.7	7.1	8.2	-1.3	2.4	0.96
4	2013	brth	118	409	709	97.9	99.1	7.9	8.8	-1.2	2.3	0.97
5	2014	brth	83	611	875	99.1	99.3	7.2	8.3	-0.2	2.1	0.98
6	2015	brth	69	660	846	100.4	100.0	6.2	7.0	0.4	1.8	0.97
7	2016	brth	69	603	787	100.7	101.2	6.9	8.4	-0.5	2.5	0.96
8	2017	brth	66	632	786	100.5	100.0	6.5	7.5	0.6	2.2	0.96
9	2018	brth	52	697	981	101.4	100.2	5.1	6.1	1.2	2.1	0.95
10	2019	brth	48	562	619	102.5	101.1	7.5	8.4	1.4	2.3	0.96
11	2020	brth	52	579	676	103.9	102.8	6.1	6.7	1.1	2.3	0.94
12	2021	brth	36	301	288	103.4	100.4	5.8	5.5	3.1	3.7	0.79
13	2022	brth	1	54	.	106.0	103.2	.	.	2.8	.	.
14	2010	calv	165	210	497	98.7	98.7	8.9	7.6	0.0	3.7	0.91
15	2011	calv	168	236	492	97.6	97.1	7.9	7.4	0.5	3.3	0.91
16	2012	calv	169	231	413	99.8	99.4	7.2	6.5	0.5	3.4	0.88
17	2013	calv	122	320	532	100.6	100.9	7.1	6.3	-0.3	3.0	0.90
18	2014	calv	84	483	700	99.5	100.2	8.0	7.3	-0.7	3.3	0.91
19	2015	calv	71	519	630	99.1	99.8	8.6	7.3	-0.6	2.6	0.96
20	2016	calv	70	489	709	99.7	100.4	8.2	6.6	-1.0	3.4	0.91
21	2017	calv	66	527	750	99.6	101.6	7.1	6.1	-2.0	3.3	0.88
22	2018	calv	52	499	715	100.2	102.4	7.7	5.7	-2.2	4.1	0.86
23	2019	calv	46	221	278	101.9	103.4	8.3	5.2	-1.5	5.0	0.82
24	2020	calv	2	19	4	107.0	102.9	2.8	3.3	4.1	0.5	1.00

RDC SS and twostep breeding value for nordic AI bulls with minimum 15 offspring

Obs	diff	d_brth	d_calv	p_brth	p_calv
1	.	1	1	.	.
2	-19	.	1	.	0
3	-18	.	1	.	0
4	-17	1	.	0	.
5	-14	.	1	.	0
6	-12	.	1	.	0
7	-11	.	2	.	0
8	-10	3	3	0	0
9	-9	2	8	0	1
10	-8	10	14	1	1
11	-7	15	25	1	2
12	-6	20	23	2	2
13	-5	45	34	4	3
14	-4	67	49	6	5
15	-3	88	82	8	8
16	-2	135	92	12	9
17	-1	161	124	15	12
18	0	204	133	19	13
19	1	147	127	13	13
20	2	90	98	8	10
21	3	40	68	4	7
22	4	26	41	2	4
23	5	14	41	1	4
24	6	11	29	1	3
25	7	7	7	1	1
26	8	3	6	0	1
27	9	3	4	0	0
28	10	1	.	0	.
29	11	1	.	0	.

RDC SS and twostep breeding value for nordic AI bulls with no offspring

Obs	BYR	name	no	mean_noff	std_noff	mean_ss	mean_two	std_ss	std_two	mean_dif	std_dif	corr_SS
1	2019	brth	23	.	.	102.8	101.4	5.1	5.4	1.4	3.5	0.78
2	2020	brth	18	.	.	104.0	104.2	6.7	6.3	1.1	4.3	0.75
3	2021	brth	25	.	.	102.6	100.1	4.8	5.0	2.5	3.6	0.74
4	2022	brth	61	.	.	104.8	103.2	4.9	5.2	1.5	3.3	0.79
5	2023	brth	50	.	.	104.3	102.5	4.7	6.1	1.8	4.4	0.70
6	2024	brth	3	.	.	101.0	100.5	3.0	1.3	0.5	2.0	0.81
7	2019	calv	27	.	.	99.7	101.6	8.0	4.7	-1.9	4.5	0.88
8	2020	calv	55	.	.	100.4	102.8	6.7	4.2	-1.8	4.0	0.67
9	2021	calv	72	.	.	101.6	103.1	6.1	4.5	-1.5	4.7	0.65
10	2022	calv	73	.	.	102.2	104.2	5.9	3.7	-2.0	4.1	0.74
11	2023	calv	50	.	.	102.0	103.6	5.0	4.0	-1.5	4.5	0.51
12	2024	calv	3	.	.	105.0	108.6	4.4	2.7	-3.6	1.6	1.00

RDC SS and twostep breeding value for nordic AI bulls with no offspring

Obs	diff	d_brth	d_calv	p_brth	p_calv
1	.	1	1	.	.
2	-15	.	1	.	0
3	-13	.	1	.	0
4	-11	.	3	.	1
5	-10	.	5	.	2
6	-9	.	7	.	3
7	-8	.	8	.	3
8	-7	2	8	1	3
9	-6	2	21	1	8
10	-5	4	20	2	7
11	-4	8	22	4	8
12	-3	13	29	7	10
13	-2	8	20	4	7
14	-1	12	25	7	9
15	0	20	23	11	8
16	1	20	24	11	9
17	2	17	15	9	5
18	3	13	16	7	6
19	4	20	6	11	2
20	5	12	9	7	3
21	6	12	12	7	4
22	7	6	2	3	1
23	8	4	1	2	0
24	9	3	.	2	.
25	10	1	1	1	0
26	11	1	.	1	.
27	13	1	.	1	.

RDC SS and twostep breeding value for Nordic bulls with no offspring

Obs	BYR	name	no	mean_ss	mean_two	std_ss	std_two	mean_dif	std_dif	corr_SS
1	2020	brth	2759	103.0	100.9	4.7	5.8	2.2	3.5	0.80
2	2021	brth	2724	103.2	100.5	4.7	5.8	2.7	3.5	0.81
3	2022	brth	2574	103.8	101.2	5.3	6.2	2.6	3.5	0.82
4	2023	brth	2270	103.5	100.8	4.5	5.8	2.8	3.8	0.75
5	2024	brth	348	103.6	101.2	5.0	5.9	2.4	4.1	0.73
6	2020	calv	2820	100.4	102.0	6.2	4.3	-1.6	4.6	0.68
7	2021	calv	2788	100.9	102.4	6.5	4.4	-1.5	4.7	0.69
8	2022	calv	2590	101.9	103.1	5.9	4.1	-1.2	4.6	0.64
9	2023	calv	2270	101.2	102.7	5.3	4.1	-1.4	4.6	0.56
10	2024	calv	348	102.0	103.5	5.3	4.2	-1.5	4.8	0.50

RDC SS and twostep breeding value for Nordic bulls with no offspring

Obs	diff	d_brth	d_calv	p_brth	p_calv
1	-20	.	1	.	0
2	-19	.	1	.	0
3	-18	.	1	.	0
4	-17	1	6	0	0
5	-16	.	5	.	0
6	-15	1	11	0	0
7	-14	.	28	.	0
8	-13	.	34	.	0
9	-12	.	71	.	1
10	-11	1	118	0	1
11	-10	1	191	0	2
12	-9	8	273	0	3
13	-8	17	348	0	3
14	-7	35	430	0	4
15	-6	66	570	1	5
16	-5	107	625	1	6
17	-4	261	808	2	7
18	-3	351	917	3	8
19	-2	501	831	5	8
20	-1	785	904	7	8
21	0	908	918	9	8
22	1	1098	852	10	8
23	2	1168	735	11	7
24	3	1166	618	11	6
25	4	1089	480	10	4
26	5	923	347	9	3
27	6	717	267	7	2
28	7	579	170	5	2
29	8	378	109	4	1
30	9	222	59	2	1
31	10	158	47	1	0
32	11	69	21	1	0
33	12	39	14	0	0
34	13	12	4	0	0
35	14	6	1	0	0
36	15	6	.	0	.

RDC SS and twostep breeding value for Nordic bulls with no offspring

Obs	diff	d_brth	d_calv	p_brth	p_calv
37	16	1	1	0	0
38	18	1	.	0	.

RDC breeding values for SS full and SS reduc for nordic AI bulls with minimum 15 offspring in full

Obs	BYR	name	no	mean_noff	std_noff	mean_ss	mean_rss	std_ss	std_rss	mean_dif	std_dif	corr_SS
1	2010	dSB1	166	236	528	95.6	96.1	8.3	8.6	-0.5	1.0	0.99
2	2011	dSB1	168	316	648	98.1	98.4	8.1	8.4	-0.3	1.0	0.99
3	2012	dSB1	167	304	561	98.5	98.6	7.1	7.3	-0.1	1.1	0.99
4	2013	dSB1	118	409	709	99.2	99.2	7.3	7.5	-0.1	1.0	0.99
5	2014	dSB1	83	611	875	100.0	99.9	8.0	8.3	0.0	1.4	0.99
6	2015	dSB1	69	660	846	101.7	101.2	5.9	6.2	0.5	1.5	0.97
7	2016	dSB1	69	603	787	101.7	102.1	6.9	5.5	-0.4	6.4	0.48
8	2017	dSB1	66	632	786	101.1	102.0	6.2	5.2	-0.9	5.3	0.59
9	2018	dSB1	52	697	981	101.8	102.3	5.4	4.5	-0.5	4.5	0.61
10	2019	dSB1	48	562	619	103.4	104.1	8.0	4.3	-0.6	7.0	0.50
11	2020	dSB1	52	579	676	104.8	103.8	6.6	4.2	1.0	5.7	0.52
12	2021	dSB1	36	301	288	104.6	103.0	5.7	4.1	1.6	5.9	0.29
13	2010	dCE1	165	185	408	98.1	98.2	10.0	10.1	-0.1	1.0	1.00
14	2011	dCE1	166	263	547	100.4	100.5	10.3	10.3	-0.1	0.9	1.00
15	2012	dCE1	166	246	459	99.9	100.0	9.6	9.7	0.0	0.9	1.00
16	2013	dCE1	118	335	622	100.0	100.2	9.2	9.3	-0.2	1.0	0.99
17	2014	dCE1	83	511	760	100.5	100.3	10.4	10.6	0.2	1.3	0.99
18	2015	dCE1	69	543	739	101.6	101.5	8.1	8.2	0.1	1.5	0.98
19	2016	dCE1	69	506	675	102.7	102.7	8.0	6.9	0.1	6.6	0.61
20	2017	dCE1	66	525	661	102.0	102.5	8.5	6.1	-0.6	5.2	0.80
21	2018	dCE1	52	591	855	103.7	102.9	7.5	6.2	0.8	4.9	0.76
22	2019	dCE1	48	462	525	103.7	103.4	8.5	5.3	0.3	6.3	0.67
23	2020	dCE1	52	486	566	103.0	102.7	6.9	5.1	0.3	5.0	0.69
24	2021	dCE1	36	259	241	104.7	103.3	6.9	5.8	1.4	5.1	0.69
25	2010	dCS1	44	107	181	104.7	104.4	13.1	13.3	0.3	1.3	1.00
26	2011	dCS1	46	84	128	100.6	100.3	11.7	11.6	0.3	1.1	1.00
27	2012	dCS1	59	121	200	100.4	100.5	12.8	12.8	-0.1	1.4	0.99
28	2013	dCS1	48	174	249	99.8	100.0	11.2	11.1	-0.1	1.4	0.99
29	2014	dCS1	32	270	295	98.8	98.4	13.1	13.3	0.3	1.7	0.99
30	2015	dCS1	35	262	285	97.0	96.5	11.5	11.5	0.5	1.8	0.99
31	2016	dCS1	33	227	241	97.0	98.8	10.5	9.3	-1.8	8.7	0.62
32	2017	dCS1	36	240	279	98.1	96.9	11.3	8.5	1.2	6.5	0.82
33	2018	dCS1	27	203	275	94.4	96.9	10.6	6.8	-2.5	7.8	0.68
34	2019	dCS1	29	196	226	97.5	97.3	11.0	7.3	0.2	7.6	0.73
35	2020	dCS1	26	218	198	97.4	97.0	11.5	5.3	0.5	8.0	0.79
36	2021	dCS1	20	146	120	95.6	96.9	10.3	6.0	-1.4	10.2	0.31
37	2010	dSB2	165	390	779	94.4	94.8	8.0	8.0	-0.5	0.9	0.99

RDC breeding values for SS full and SS reduc for nordic AI bulls with minimum 15 offspring in full

Obs	BYR	name	no	mean_noff	std_noff	mean_ss	mean_rss	std_ss	std_rss	mean_dif	std_dif	corr_SS
38	2011	dSB2	168	547	1134	98.7	99.0	8.2	8.3	-0.3	1.0	0.99
39	2012	dSB2	169	515	880	98.1	98.3	7.3	7.5	-0.1	1.2	0.99
40	2013	dSB2	121	684	1100	98.0	97.7	8.8	9.1	0.3	1.2	0.99
41	2014	dSB2	83	1024	1346	100.0	99.8	6.5	6.7	0.2	1.5	0.98
42	2015	dSB2	69	1053	1166	100.6	100.2	7.2	7.5	0.4	1.4	0.98
43	2016	dSB2	70	1055	1477	101.0	101.3	7.4	5.3	-0.3	6.6	0.50
44	2017	dSB2	66	1058	1358	101.4	101.9	6.8	5.7	-0.5	5.2	0.67
45	2018	dSB2	52	1217	1597	102.5	101.3	5.3	4.5	1.2	5.0	0.48
46	2019	dSB2	50	877	948	102.8	103.0	7.2	4.4	-0.2	6.4	0.46
47	2020	dSB2	52	895	1021	104.8	101.8	6.0	4.3	2.9	5.0	0.57
48	2021	dSB2	42	408	466	103.6	102.4	6.2	3.3	1.2	6.6	0.14
49	2010	dCE2	165	286	575	97.2	97.4	10.3	10.4	-0.2	1.2	0.99
50	2011	dCE2	168	433	948	100.6	100.8	10.1	10.2	-0.1	1.1	0.99
51	2012	dCE2	168	398	696	99.6	99.5	9.6	9.8	0.0	1.1	0.99
52	2013	dCE2	121	537	922	99.1	99.0	10.3	10.6	0.1	1.2	0.99
53	2014	dCE2	83	837	1153	100.1	99.8	8.7	9.1	0.3	1.1	0.99
54	2015	dCE2	69	830	966	101.8	101.9	8.1	8.2	-0.1	1.4	0.98
55	2016	dCE2	70	874	1238	101.8	101.8	7.9	6.4	0.0	5.7	0.71
56	2017	dCE2	66	862	1123	102.9	103.2	8.0	6.4	-0.3	4.8	0.80
57	2018	dCE2	52	1022	1362	103.6	102.9	7.7	5.9	0.7	5.4	0.72
58	2019	dCE2	50	707	787	104.0	103.1	6.9	5.0	0.9	5.9	0.54
59	2020	dCE2	52	735	827	103.6	102.3	6.9	4.7	1.3	5.1	0.67
60	2021	dCE2	40	357	377	104.7	102.8	6.3	5.1	1.9	5.7	0.51
61	2010	dCS2	44	201	268	106.9	106.8	14.4	14.7	0.1	0.9	1.00
62	2011	dCS2	58	146	169	101.4	100.9	13.4	13.6	0.4	1.0	1.00
63	2012	dCS2	66	191	258	101.7	101.8	13.5	13.7	-0.1	1.3	1.00
64	2013	dCS2	56	218	283	99.5	99.7	11.7	12.0	-0.2	1.3	0.99
65	2014	dCS2	43	283	308	98.6	99.4	11.7	12.1	-0.8	1.6	0.99
66	2015	dCS2	43	292	337	97.4	98.2	10.9	11.1	-0.7	1.7	0.99
67	2016	dCS2	40	318	348	97.8	98.8	13.5	10.4	-1.1	8.5	0.78
68	2017	dCS2	44	275	300	97.9	98.0	10.9	8.6	-0.1	7.6	0.72
69	2018	dCS2	39	238	237	95.6	98.3	11.3	6.9	-2.7	8.0	0.72
70	2019	dCS2	35	252	239	94.6	97.2	11.9	8.0	-2.5	9.2	0.64
71	2020	dCS2	31	233	216	94.7	97.9	11.5	6.4	-3.2	8.3	0.71
72	2021	dCS2	22	178	141	93.9	98.0	12.7	8.1	-4.1	10.5	0.57
73	2010	mSB1	165	210	497	97.3	97.5	8.9	9.2	-0.1	2.2	0.97
74	2011	mSB1	168	236	492	96.5	96.5	8.2	8.2	0.1	2.4	0.96

RDC breeding values for SS full and SS reduc for nordic AI bulls with minimum 15 offspring in full

Obs	BYR	name	no	mean_noff	std_noff	mean_ss	mean_rss	std_ss	std_rss	mean_dif	std_dif	corr_SS
75	2012	mSB1	169	231	413	98.9	98.8	6.9	7.2	0.1	2.8	0.92
76	2013	mSB1	122	320	532	99.1	99.6	6.9	6.6	-0.5	3.4	0.88
77	2014	mSB1	84	483	700	98.3	98.3	8.6	7.4	0.0	5.6	0.77
78	2015	mSB1	71	519	630	98.4	99.3	8.1	6.4	-0.9	6.3	0.65
79	2016	mSB1	70	489	709	98.8	99.4	8.2	6.1	-0.6	6.8	0.59
80	2017	mSB1	66	527	750	99.2	99.7	6.8	6.2	-0.5	6.8	0.46
81	2018	mSB1	52	499	715	100.0	100.9	7.8	5.7	-0.9	7.0	0.51
82	2019	mSB1	46	221	278	101.6	102.0	8.6	5.1	-0.4	8.2	0.38
83	2010	mCE1	165	169	399	96.1	96.0	9.2	9.4	0.1	1.8	0.98
84	2011	mCE1	168	194	418	96.0	96.0	8.9	9.1	0.0	1.9	0.98
85	2012	mCE1	169	189	343	99.6	99.4	8.8	9.1	0.2	2.4	0.96
86	2013	mCE1	121	270	465	99.0	99.4	8.6	8.4	-0.3	2.8	0.95
87	2014	mCE1	84	406	604	100.3	100.3	7.3	7.9	0.0	5.1	0.78
88	2015	mCE1	71	430	538	98.6	98.6	8.9	8.2	0.0	6.3	0.73
89	2016	mCE1	70	407	593	100.1	101.5	8.3	7.1	-1.4	6.3	0.68
90	2017	mCE1	66	439	630	100.3	100.1	7.6	6.9	0.2	5.7	0.70
91	2018	mCE1	52	417	607	101.4	102.3	7.7	5.7	-0.9	6.9	0.50
92	2019	mCE1	46	188	240	102.7	103.3	7.8	5.2	-0.6	6.5	0.56
93	2010	mCS1	44	114	171	99.5	99.0	13.2	13.2	0.5	2.5	0.98
94	2011	mCS1	49	86	102	102.3	101.5	11.6	10.5	0.8	4.0	0.94
95	2012	mCS1	60	109	152	102.4	102.3	14.1	13.3	0.1	3.6	0.97
96	2013	mCS1	48	146	193	102.5	100.7	11.2	11.5	1.8	4.5	0.92
97	2014	mCS1	33	219	229	99.1	103.0	11.9	9.3	-3.8	7.6	0.77
98	2015	mCS1	36	199	206	100.3	99.7	12.5	8.3	0.6	7.6	0.81
99	2016	mCS1	32	196	195	103.7	104.3	13.0	8.5	-0.6	9.1	0.72
100	2017	mCS1	36	189	204	100.7	102.3	11.6	8.6	-1.6	9.6	0.59
101	2018	mCS1	33	160	190	104.3	103.2	11.3	6.5	1.1	9.4	0.55
102	2019	mCS1	21	115	105	103.7	104.0	11.1	5.0	-0.2	9.2	0.58
103	2010	mSB2	165	155	385	101.0	101.3	8.3	8.9	-0.3	3.0	0.94
104	2011	mSB2	166	179	382	99.6	100.0	7.5	7.8	-0.4	3.9	0.87
105	2012	mSB2	169	174	322	100.7	100.8	7.2	7.7	-0.2	5.0	0.78
106	2013	mSB2	121	246	412	102.1	102.5	7.4	7.2	-0.4	5.5	0.72
107	2014	mSB2	84	362	519	100.6	101.4	7.7	7.1	-0.8	6.5	0.62
108	2015	mSB2	71	388	482	99.8	101.8	8.3	6.3	-2.1	7.4	0.51
109	2016	mSB2	70	340	499	100.2	102.2	8.0	6.2	-2.0	7.5	0.47
110	2017	mSB2	66	323	460	99.8	102.2	7.3	5.9	-2.4	7.1	0.44
111	2018	mSB2	38	177	245	99.4	102.8	8.7	5.9	-3.4	7.0	0.60

RDC breeding values for SS full and SS reduc for nordic AI bulls with minimum 15 offspring in full

Obs	BYR	name	no	mean_noff	std_noff	mean_ss	mean_rss	std_ss	std_rss	mean_dif	std_dif	corr_SS
112	2010	mCE2	165	128	328	97.8	97.9	8.7	9.0	0.0	2.2	0.97
113	2011	mCE2	166	152	335	98.6	98.7	8.1	8.3	-0.1	2.5	0.95
114	2012	mCE2	168	147	275	100.6	100.7	7.5	7.9	0.0	3.4	0.91
115	2013	mCE2	117	221	376	100.3	100.5	7.2	7.4	-0.2	3.9	0.85
116	2014	mCE2	83	315	456	101.1	101.0	5.3	6.3	0.1	4.9	0.66
117	2015	mCE2	71	329	421	100.7	100.9	7.8	7.0	-0.1	5.9	0.68
118	2016	mCE2	70	288	424	101.2	102.7	7.1	6.1	-1.5	6.2	0.57
119	2017	mCE2	66	269	386	100.9	101.7	5.4	5.9	-0.8	4.2	0.73
120	2018	mCE2	38	149	207	102.1	103.0	6.0	5.2	-0.9	6.1	0.41
121	2010	mCS2	42	85	134	98.6	98.4	9.4	9.9	0.2	2.9	0.96
122	2011	mCS2	44	65	72	101.3	100.2	11.2	10.2	1.2	4.7	0.91
123	2012	mCS2	57	82	114	101.2	100.9	10.5	9.7	0.3	4.6	0.90
124	2013	mCS2	44	115	144	102.2	99.5	9.5	9.0	2.7	5.1	0.85
125	2014	mCS2	29	165	152	97.7	101.7	12.0	9.7	-4.0	9.7	0.62
126	2015	mCS2	32	144	126	99.0	98.9	11.2	8.7	0.1	7.5	0.75
127	2016	mCS2	29	147	138	101.3	102.1	13.5	7.3	-0.8	9.7	0.72
128	2017	mCS2	28	140	127	101.9	101.8	8.2	7.1	0.1	9.0	0.32
129	2018	mCS2	20	72	79	104.7	102.4	11.6	6.3	2.3	8.7	0.67
130	2010	brth	166	236	528	95.0	95.4	8.1	8.3	-0.5	0.9	0.99
131	2011	brth	168	316	648	98.5	98.8	8.3	8.5	-0.4	0.9	0.99
132	2012	brth	167	304	561	98.3	98.5	7.3	7.5	-0.2	1.0	0.99
133	2013	brth	118	409	709	98.8	98.7	8.0	8.4	0.1	1.0	0.99
134	2014	brth	83	611	875	100.1	99.9	7.3	7.6	0.2	1.3	0.98
135	2015	brth	69	660	846	101.3	100.9	6.3	6.5	0.4	1.3	0.98
136	2016	brth	69	603	787	101.6	102.0	7.0	5.4	-0.4	6.4	0.50
137	2017	brth	66	632	786	101.5	102.3	6.6	5.4	-0.8	4.9	0.68
138	2018	brth	52	697	981	102.4	102.2	5.3	4.5	0.2	4.6	0.57
139	2019	brth	48	562	619	103.4	103.8	7.6	4.1	-0.4	6.5	0.52
140	2020	brth	52	579	676	104.9	103.0	6.2	4.3	1.8	5.0	0.60
141	2021	brth	36	301	288	104.5	103.0	5.9	3.8	1.5	6.3	0.22
142	2010	calv	165	210	497	98.5	98.5	8.6	9.1	0.0	2.4	0.96
143	2011	calv	168	236	492	97.4	97.4	7.7	7.8	0.1	2.8	0.94
144	2012	calv	169	231	413	99.5	99.3	6.9	7.4	0.2	3.7	0.87
145	2013	calv	122	320	532	100.3	100.5	6.8	6.8	-0.2	4.1	0.82
146	2014	calv	84	483	700	99.3	99.4	7.7	7.3	-0.1	5.5	0.73
147	2015	calv	71	519	630	98.7	100.0	8.2	6.4	-1.2	6.4	0.65
148	2016	calv	70	489	709	99.3	100.6	7.9	6.2	-1.3	6.8	0.56

RDC breeding values for SS full and SS reduc for nordic AI bulls with minimum 15 offspring in full

Obs	BYR	name	no	mean_noff	std_noff	mean_ss	mean_rss	std_ss	std_rss	mean_dif	std_dif	corr_SS
149	2017	calv	66	527	750	99.3	100.5	6.9	6.4	-1.2	6.8	0.47
150	2018	calv	52	499	715	99.8	101.9	7.4	6.0	-2.1	6.6	0.53
151	2019	calv	46	221	278	101.5	103.0	8.0	5.1	-1.5	7.9	0.33

RDC changes for SS full and SS reduc for nordic AI bulls with minimum 15 offspring in full, born >=2015

Obs	diff	d_brth	d_calv	p_brth	p_calv
1	-29	.	1	.	0
2	-28	.	.	.	.
3	-27	.	.	.	.
4	-25	.	.	.	.
5	-24	.	.	.	.
6	-23	.	.	.	.
7	-22	.	.	.	.
8	-21	1	.	0	.
9	-20	.	1	.	0
10	-19	1	1	0	0
11	-18	.	.	.	.
12	-17	.	2	.	1
13	-16	1	2	0	1
14	-15	.	1	.	0
15	-14	2	4	1	1
16	-13	2	2	1	1
17	-12	3	5	1	2
18	-11	3	11	1	4
19	-10	3	7	1	2
20	-9	5	6	1	2
21	-8	8	14	2	5
22	-7	4	8	1	3
23	-6	11	19	3	6
24	-5	19	13	5	4
25	-4	13	11	3	4
26	-3	15	19	4	6
27	-2	28	18	7	6
28	-1	32	19	8	6
29	0	49	18	12	6
30	1	51	20	13	7
31	2	25	14	6	5
32	3	32	21	8	7
33	4	19	17	5	6
34	5	14	6	4	2
35	6	14	11	4	4
36	7	8	10	2	3

RDC changes for SS full and SS reduc for nordic AI bulls with minimum 15 offspring in full, born >=2015

Obs	diff	d_brth	d_calv	p_brth	p_calv
37	8	8	6	2	2
38	9	5	8	1	3
39	10	5	3	1	1
40	11	6	3	2	1
41	12	2	2	1	1
42	13	1	.	0	.
43	14	3	2	1	1
44	15	.	1	.	0
45	16	.	.	.	.
46	17	.	.	.	.
47	18	.	.	.	.
48	21	.	.	.	.
49	22	.	.	.	.
50	25	.	1	.	0
51	27	.	.	.	.

RDC changes for SS full and SS reduc for nordic AI bulls with minimum 15 offspring in full, born >=2015

Obs	diff	d_dSB1	d_dCE1	d_dCS1	d_dSB2	d_dCE2	d_dCS2
1	-29	.	.	.	.	.	.
2	-28	.	.	.	.	.	.
3	-27	.	.	.	1	.	.
4	-25	.	.	.	.	.	.
5	-24	.	.	.	.	.	2
6	-23	1	.	.	.	.	1
7	-22	.	1	.	.	.	1
8	-21	.	.	1	.	.	.
9	-20	.	.	1	.	.	1
10	-19	.	1	2	.	1	3
11	-18	.	.	.	2	.	1
12	-17	.	.	1	1	.	3
13	-16	1	.	1	.	1	.
14	-15	1	2	2	.	.	1
15	-14	4	2	2	2	.	4
16	-13	4	2	1	2	1	8
17	-12	.	1	1	.	2	3
18	-11	4	2	7	2	3	7
19	-10	4	4	6	5	1	2
20	-9	6	7	7	1	5	8
21	-8	5	6	1	10	8	8
22	-7	13	5	7	10	16	9
23	-6	12	9	4	12	4	9
24	-5	10	12	8	9	12	10
25	-4	16	24	3	12	18	16
26	-3	19	13	12	19	22	9
27	-2	28	27	7	27	24	29
28	-1	30	34	18	44	42	20
29	0	48	47	22	32	56	14
30	1	59	47	18	43	35	7
31	2	28	31	13	42	25	11
32	3	21	28	11	28	17	6
33	4	13	20	3	19	26	12
34	5	12	19	11	18	15	5
35	6	12	10	8	13	18	10
36	7	5	14	5	13	17	6

RDC changes for SS full and SS reduc for nordic AI bulls with minimum 15 offspring in full, born >=2015

Obs	diff	d_dSB1	d_dCE1	d_dCS1	d_dSB2	d_dCE2	d_dCS2
37	8	11	6	2	10	13	8
38	9	9	8	2	5	4	1
39	10	8	3	5	6	8	4
40	11	1	3	4	4	1	3
41	12	5	1	1	3	3	3
42	13	1	.	1	5	1	4
43	14	2	2	4	1	1	2
44	15	.	1	2	2	1	1
45	16	.	.	1	.	.	.
46	17	.	.	.	.	.	2
47	18	.	1	1	.	.	1
48	21	.	.	.	.	.	.
49	22	.	.	1	.	.	.
50	25	.	.	.	.	.	.
51	27	.	.	.	.	.	.

RDC changes for SS full and SS reduc for nordic AI bulls with minimum 15 offspring in full, born >=2015

Obs	diff	d_mSB1	d_mCE1	d_mCS1	d_mSB2	d_mCE2	d_mCS2
1	-29	.	.	.	.	.	.
2	-28	1	2	.	.	.	.
3	-27	.	.	.	.	.	1
4	-25	.	.	.	1	.	.
5	-24	1	.	.	.	.	.
6	-23	.	.	.	.	.	.
7	-22	.	.	.	.	.	1
8	-21	.	.	.	1	.	1
9	-20	1	.	2	2	.	.
10	-19	1	.	3	1	.	.
11	-18	1	.	1	2	.	.
12	-17	2	2	2	1	.	1
13	-16	.	1	3	.	1	.
14	-15	2	1	.	3	1	2
15	-14	2	3	2	2	.	1
16	-13	4	2	3	4	4	2
17	-12	5	2	3	5	2	2
18	-11	6	4	5	8	7	2
19	-10	8	7	6	2	5	3
20	-9	4	6	1	15	3	1
21	-8	11	7	2	6	9	1
22	-7	7	5	5	13	5	2
23	-6	12	12	5	18	12	4
24	-5	17	13	3	9	9	3
25	-4	9	19	8	9	18	4
26	-3	13	19	4	18	14	8
27	-2	18	28	6	25	18	6
28	-1	14	22	7	9	17	2
29	0	18	14	7	12	15	4
30	1	25	20	8	9	23	8
31	2	25	11	6	12	11	3
32	3	19	23	11	12	19	4
33	4	13	24	5	9	12	10
34	5	13	15	6	6	10	1
35	6	15	11	5	7	9	4
36	7	9	6	7	7	5	9

RDC changes for SS full and SS reduc for nordic AI bulls with minimum 15 offspring in full, born >=2015

Obs	diff	d_mSB1	d_mCE1	d_mCS1	d_mSB2	d_mCE2	d_mCS2
37	8	11	8	7	3	8	5
38	9	6	7	7	2	3	1
39	10	4	3	2	4	1	4
40	11	2	3	2	4	1	.
41	12	3	2	4	1	3	2
42	13	2	2	3	3	1	2
43	14	.	1	1	.	.	.
44	15	1	.	3	.	.	3
45	16	1	.	.	.	.	1
46	17	.	1	3	1	.	1
47	18	.	.	1	.	.	1
48	21	1	.	.	.	.	.
49	22	.	.	.	.	.	.
50	25	.	.	.	.	.	.
51	27	.	.	.	1	.	.

RDC changes for SS full and SS reduc for nordic AI bulls with minimum 15 offspring in full, born >=2015

Obs	diff	p_dSB1	p_dCE1	p_dCS1	p_dSB2	p_dCE2	p_dCS2
1	-29	.	.	.	.	.	.
2	-28	.	.	.	.	.	.
3	-27	.	.	.	0	.	.
4	-25	.	.	.	.	.	.
5	-24	.	.	.	.	.	1
6	-23	0	.	.	.	.	0
7	-22	.	0	.	.	.	0
8	-21	.	.	0	.	.	.
9	-20	.	.	0	.	.	0
10	-19	.	0	1	.	0	1
11	-18	.	.	.	0	.	0
12	-17	.	.	0	0	.	1
13	-16	0	.	0	.	0	.
14	-15	0	1	1	.	.	0
15	-14	1	1	1	0	.	2
16	-13	1	1	0	0	0	3
17	-12	.	0	0	.	0	1
18	-11	1	1	3	0	1	3
19	-10	1	1	3	1	0	1
20	-9	2	2	3	0	1	3
21	-8	1	2	0	2	2	3
22	-7	3	1	3	2	4	4
23	-6	3	2	2	3	1	4
24	-5	3	3	4	2	3	4
25	-4	4	6	1	3	4	6
26	-3	5	3	6	5	5	4
27	-2	7	7	3	7	6	11
28	-1	8	9	9	11	10	8
29	0	12	12	11	8	14	5
30	1	15	12	9	11	9	3
31	2	7	8	6	10	6	4
32	3	5	7	5	7	4	2
33	4	3	5	1	5	6	5
34	5	3	5	5	4	4	2
35	6	3	3	4	3	4	4
36	7	1	4	2	3	4	2

RDC changes for SS full and SS reduc for nordic AI bulls with minimum 15 offspring in full, born >=2015

Obs	diff	p_dSB1	p_dCE1	p_dCS1	p_dSB2	p_dCE2	p_dCS2
37	8	3	2	1	2	3	3
38	9	2	2	1	1	1	0
39	10	2	1	2	1	2	2
40	11	0	1	2	1	0	1
41	12	1	0	0	1	1	1
42	13	0	.	0	1	0	2
43	14	1	1	2	0	0	1
44	15	.	0	1	0	0	0
45	16	.	.	0	.	.	.
46	17	.	.	.	.	.	1
47	18	.	0	0	.	.	0
48	21	.	.	.	.	.	.
49	22	.	.	0	.	.	.
50	25	.	.	.	.	.	.
51	27	.	.	.	.	.	.

RDC changes for SS full and SS reduc for nordic AI bulls with minimum 15 offspring in full, born >=2015

Obs	diff	p_mSB1	p_mCE1	p_mCS1	p_mSB2	p_mCE2	p_mCS2
1	-29	.	.	.	.	.	.
2	-28	0	1	.	.	.	.
3	-27	.	.	.	.	.	1
4	-25	.	.	.	0	.	.
5	-24	0	.	.	.	.	.
6	-23	.	.	.	.	.	.
7	-22	.	.	.	.	.	1
8	-21	.	.	.	0	.	1
9	-20	0	.	1	1	.	.
10	-19	0	.	2	0	.	.
11	-18	0	.	1	1	.	.
12	-17	1	1	1	0	.	1
13	-16	.	0	2	.	0	.
14	-15	1	0	.	1	0	2
15	-14	1	1	1	1	.	1
16	-13	1	1	2	2	2	2
17	-12	2	1	2	2	1	2
18	-11	2	1	3	3	3	2
19	-10	3	2	4	1	2	3
20	-9	1	2	1	6	1	1
21	-8	4	2	1	2	4	1
22	-7	2	2	3	5	2	2
23	-6	4	4	3	7	5	4
24	-5	6	4	2	4	4	3
25	-4	3	6	5	4	7	4
26	-3	4	6	3	7	6	7
27	-2	6	9	4	10	7	5
28	-1	5	7	4	4	7	2
29	0	6	5	4	5	6	4
30	1	8	7	5	4	9	7
31	2	8	4	4	5	4	3
32	3	6	8	7	5	8	4
33	4	4	8	3	4	5	9
34	5	4	5	4	2	4	1
35	6	5	4	3	3	4	4
36	7	3	2	4	3	2	8

RDC changes for SS full and SS reduc for nordic AI bulls with minimum 15 offspring in full, born >=2015

Obs	diff	p_mSB1	p_mCE1	p_mCS1	p_mSB2	p_mCE2	p_mCS2
37	8	4	3	4	1	3	5
38	9	2	2	4	1	1	1
39	10	1	1	1	2	0	4
40	11	1	1	1	2	0	.
41	12	1	1	3	0	1	2
42	13	1	1	2	1	0	2
43	14	.	0	1	.	.	.
44	15	0	.	2	.	.	3
45	16	0	.	.	.	.	1
46	17	.	0	2	0	.	1
47	18	.	.	1	.	.	1
48	21	0	.	.	.	.	.
49	22	.	.	.	.	.	.
50	25	.	.	.	.	.	.
51	27	.	.	.	0	.	.

RDC breeding values for traditional full and reduc for nordic AI bulls with minimum 15 offspring in full

Obs	BYR	name	no	mean_noff	std_noff	mean_e	mean_re	std_e	std_re	mean_dif	std_dif	corr_SS
1	2010	dSB1	166	236	528	97.0	97.0	9.0	9.2	0.0	0.6	1.00
2	2011	dSB1	168	316	648	98.9	98.9	8.8	8.9	0.0	0.6	1.00
3	2012	dSB1	167	304	561	98.9	98.8	7.7	7.9	0.0	0.8	0.99
4	2013	dSB1	118	409	709	99.4	99.3	8.0	8.1	0.0	0.9	0.99
5	2014	dSB1	83	611	875	99.5	99.4	8.4	8.6	0.1	1.6	0.98
6	2015	dSB1	69	660	846	100.6	100.3	6.4	6.6	0.3	1.7	0.97
7	2016	dSB1	69	603	787	100.8	100.0	7.4	4.9	0.8	7.3	0.35
8	2017	dSB1	66	632	786	100.1	100.2	6.5	4.0	-0.1	5.9	0.46
9	2018	dSB1	52	697	981	99.9	99.2	5.6	3.4	0.7	5.6	0.30
10	2019	dSB1	48	562	619	101.3	100.9	8.5	3.3	0.4	8.4	0.22
11	2020	dSB1	52	579	676	102.1	99.6	7.2	2.5	2.5	6.2	0.54
12	2021	dSB1	36	301	288	102.3	100.0	6.3	2.3	2.3	6.3	0.18
13	2010	dCE1	165	185	408	98.5	98.5	10.1	10.1	0.0	0.5	1.00
14	2011	dCE1	166	263	547	100.4	100.4	10.5	10.5	0.0	0.5	1.00
15	2012	dCE1	166	246	459	100.0	99.9	9.6	9.7	0.1	0.7	1.00
16	2013	dCE1	118	335	622	99.6	99.6	9.2	9.2	0.0	0.8	1.00
17	2014	dCE1	83	511	760	99.7	99.4	10.1	10.2	0.3	1.2	0.99
18	2015	dCE1	69	543	739	100.8	100.8	8.2	8.2	0.0	1.6	0.98
19	2016	dCE1	69	506	675	101.6	99.9	8.1	6.0	1.7	8.0	0.40
20	2017	dCE1	66	525	661	100.6	100.5	8.7	4.9	0.2	6.6	0.66
21	2018	dCE1	52	591	855	102.1	99.6	7.1	4.0	2.5	6.5	0.41
22	2019	dCE1	48	462	525	102.0	99.8	8.5	3.8	2.1	8.3	0.26
23	2020	dCE1	52	486	566	101.1	98.9	6.8	2.9	2.2	6.2	0.41
24	2021	dCE1	36	259	241	102.9	99.2	6.3	3.1	3.6	6.2	0.26
25	2010	dCS1	44	107	181	104.3	104.4	13.2	13.2	0.0	0.6	1.00
26	2011	dCS1	46	84	128	100.1	99.8	12.0	11.8	0.3	1.1	1.00
27	2012	dCS1	59	121	200	100.5	100.6	12.8	12.9	-0.1	0.8	1.00
28	2013	dCS1	48	174	249	100.5	100.7	11.4	11.4	-0.2	1.2	0.99
29	2014	dCS1	32	270	295	98.5	98.9	13.6	13.6	-0.4	1.5	0.99
30	2015	dCS1	35	262	285	97.5	97.1	11.2	11.2	0.5	1.5	0.99
31	2016	dCS1	33	227	241	97.6	101.2	10.6	7.1	-3.6	9.5	0.49
32	2017	dCS1	36	240	279	99.5	98.4	11.2	6.6	1.1	9.0	0.60
33	2018	dCS1	27	203	275	95.7	100.2	10.9	5.0	-4.5	10.7	0.27
34	2019	dCS1	29	196	226	99.4	99.8	10.6	4.6	-0.4	10.0	0.34
35	2020	dCS1	26	218	198	99.8	101.1	11.1	2.7	-1.3	10.5	0.37
36	2021	dCS1	20	146	120	98.2	101.1	10.4	2.3	-3.0	10.9	-0.12
37	2010	dSB2	165	390	779	95.8	95.8	8.4	8.5	0.0	0.7	1.00

RDC breeding values for traditional full and reduc for nordic AI bulls with minimum 15 offspring in full

Obs	BYR	name	no	mean_noff	std_noff	mean_e	mean_re	std_e	std_re	mean_dif	std_dif	corr_SS
38	2011	dSB2	168	547	1134	99.6	99.6	8.8	8.9	0.0	0.8	1.00
39	2012	dSB2	169	515	880	98.4	98.4	8.0	8.2	0.0	1.0	0.99
40	2013	dSB2	121	684	1100	98.2	97.9	9.4	9.6	0.2	1.3	0.99
41	2014	dSB2	83	1024	1346	99.2	99.2	7.0	7.3	0.0	1.4	0.98
42	2015	dSB2	69	1053	1166	99.3	99.4	7.6	8.0	-0.1	1.7	0.98
43	2016	dSB2	70	1055	1477	99.9	99.7	8.0	4.8	0.2	7.8	0.35
44	2017	dSB2	66	1058	1358	99.8	99.8	6.7	4.2	-0.1	6.0	0.48
45	2018	dSB2	52	1217	1597	99.9	98.3	5.3	3.4	1.6	5.6	0.22
46	2019	dSB2	50	877	948	100.3	100.1	7.5	3.1	0.2	7.3	0.27
47	2020	dSB2	52	895	1021	102.2	98.5	6.2	2.8	3.6	5.9	0.34
48	2021	dSB2	42	408	466	100.2	99.4	6.9	2.3	0.8	7.1	0.07
49	2010	dCE2	165	286	575	97.8	97.8	10.3	10.3	0.0	0.6	1.00
50	2011	dCE2	168	433	948	100.8	100.8	10.1	10.1	0.0	0.7	1.00
51	2012	dCE2	168	398	696	99.5	99.4	10.0	10.1	0.1	0.9	1.00
52	2013	dCE2	121	537	922	98.7	98.6	10.4	10.6	0.1	1.0	1.00
53	2014	dCE2	83	837	1153	99.2	98.9	9.0	9.2	0.3	1.1	0.99
54	2015	dCE2	69	830	966	100.6	100.7	8.1	8.1	-0.1	1.4	0.99
55	2016	dCE2	70	874	1238	100.3	99.1	8.1	5.3	1.2	7.2	0.48
56	2017	dCE2	66	862	1123	101.0	100.4	8.1	4.2	0.6	6.2	0.66
57	2018	dCE2	52	1022	1362	101.6	98.8	7.6	4.3	2.7	7.3	0.35
58	2019	dCE2	50	707	787	101.9	99.7	7.0	3.4	2.2	7.0	0.23
59	2020	dCE2	52	735	827	101.1	98.3	6.7	3.0	2.9	6.2	0.40
60	2021	dCE2	40	357	377	102.2	99.0	6.0	2.7	3.2	6.1	0.21
61	2010	dCS2	44	201	268	106.3	106.3	14.7	15.0	0.0	0.6	1.00
62	2011	dCS2	58	146	169	100.8	100.4	13.4	13.7	0.4	1.0	1.00
63	2012	dCS2	66	191	258	101.5	101.6	13.3	13.7	-0.2	0.9	1.00
64	2013	dCS2	56	218	283	99.6	99.6	11.5	11.9	0.0	1.6	0.99
65	2014	dCS2	43	283	308	99.0	99.5	11.9	12.4	-0.5	1.2	1.00
66	2015	dCS2	43	292	337	98.7	98.7	10.8	11.3	0.0	1.4	0.99
67	2016	dCS2	40	318	348	99.4	100.4	13.5	8.4	-1.0	11.8	0.49
68	2017	dCS2	44	275	300	100.1	99.4	10.8	6.4	0.8	9.0	0.55
69	2018	dCS2	39	238	237	97.5	100.9	11.5	5.0	-3.4	10.4	0.43
70	2019	dCS2	35	252	239	97.7	100.9	11.7	5.2	-3.2	11.3	0.31
71	2020	dCS2	31	233	216	97.8	101.9	11.3	2.5	-4.1	11.0	0.24
72	2021	dCS2	22	178	141	97.0	101.1	12.3	3.2	-4.2	12.8	-0.03
73	2010	mSB1	165	210	497	97.7	97.8	9.5	9.7	-0.2	1.7	0.98
74	2011	mSB1	168	236	492	96.5	96.6	8.2	8.3	-0.1	2.3	0.96

RDC breeding values for traditional full and reduc for nordic AI bulls with minimum 15 offspring in full

Obs	BYR	name	no	mean_noff	std_noff	mean_e	mean_re	std_e	std_re	mean_dif	std_dif	corr_SS
75	2012	mSB1	169	231	413	98.5	98.5	7.2	7.3	0.0	2.9	0.92
76	2013	mSB1	122	320	532	99.2	99.5	7.1	6.9	-0.2	3.2	0.89
77	2014	mSB1	84	483	700	97.8	97.1	8.6	7.5	0.7	6.8	0.66
78	2015	mSB1	71	519	630	98.0	98.7	8.1	5.6	-0.7	7.4	0.47
79	2016	mSB1	70	489	709	98.1	98.2	8.0	4.8	-0.1	7.5	0.39
80	2017	mSB1	66	527	750	99.0	99.0	7.0	4.7	0.0	6.7	0.40
81	2018	mSB1	52	499	715	99.6	98.8	7.4	4.8	0.8	7.5	0.30
82	2019	mSB1	46	221	278	100.0	99.8	8.8	3.8	0.3	8.6	0.29
83	2010	mCE1	165	169	399	96.3	96.4	9.6	9.6	-0.1	1.3	0.99
84	2011	mCE1	168	194	418	95.7	95.7	9.1	9.2	0.0	2.0	0.98
85	2012	mCE1	169	189	343	98.8	98.5	9.0	9.1	0.3	2.2	0.97
86	2013	mCE1	121	270	465	98.4	98.5	8.6	8.3	0.0	2.7	0.95
87	2014	mCE1	84	406	604	99.3	97.8	8.0	8.4	1.6	6.1	0.72
88	2015	mCE1	71	430	538	97.2	95.9	8.9	7.8	1.3	7.1	0.65
89	2016	mCE1	70	407	593	99.1	98.6	8.0	5.9	0.5	7.0	0.52
90	2017	mCE1	66	439	630	99.4	97.7	7.7	5.6	1.7	6.7	0.53
91	2018	mCE1	52	417	607	99.9	98.9	7.4	4.8	1.0	7.7	0.26
92	2019	mCE1	46	188	240	100.5	98.3	7.3	3.5	2.2	7.0	0.33
93	2010	mCS1	44	114	171	98.8	98.3	13.9	13.7	0.5	2.3	0.99
94	2011	mCS1	49	86	102	101.8	100.6	11.2	10.7	1.2	3.9	0.94
95	2012	mCS1	60	109	152	101.2	101.3	13.6	13.4	-0.1	3.8	0.96
96	2013	mCS1	48	146	193	101.1	100.3	11.5	12.5	0.8	4.8	0.92
97	2014	mCS1	33	219	229	97.6	102.1	12.6	10.1	-4.5	8.7	0.73
98	2015	mCS1	36	199	206	98.9	99.5	13.0	8.3	-0.6	9.2	0.71
99	2016	mCS1	32	196	195	102.2	102.9	13.2	7.6	-0.7	9.9	0.67
100	2017	mCS1	36	189	204	99.1	100.9	11.7	8.5	-1.8	9.7	0.58
101	2018	mCS1	33	160	190	103.3	101.5	10.2	4.8	1.8	10.2	0.24
102	2019	mCS1	21	115	105	100.9	102.4	12.0	4.3	-1.5	10.1	0.57
103	2010	mSB2	165	155	385	101.4	101.8	9.4	9.8	-0.4	2.9	0.96
104	2011	mSB2	166	179	382	99.5	100.0	8.1	8.3	-0.5	4.2	0.87
105	2012	mSB2	169	174	322	100.6	100.5	7.7	7.7	0.1	5.4	0.75
106	2013	mSB2	121	246	412	102.3	102.4	7.2	6.9	-0.1	6.0	0.64
107	2014	mSB2	84	362	519	100.8	100.4	8.0	7.6	0.4	7.5	0.53
108	2015	mSB2	71	388	482	99.5	100.6	9.1	6.2	-1.1	9.7	0.25
109	2016	mSB2	70	340	499	100.1	100.9	8.3	5.3	-0.8	8.4	0.30
110	2017	mSB2	66	323	460	100.1	101.6	7.5	4.2	-1.5	7.3	0.32
111	2018	mSB2	38	177	245	99.2	100.9	7.6	4.3	-1.8	8.0	0.19

RDC breeding values for traditional full and reduc for nordic AI bulls with minimum 15 offspring in full

Obs	BYR	name	no	mean_noff	std_noff	mean_e	mean_re	std_e	std_re	mean_dif	std_dif	corr_SS
112	2010	mCE2	165	128	328	97.9	98.2	8.9	9.1	-0.3	2.0	0.97
113	2011	mCE2	166	152	335	98.2	98.3	8.4	8.5	-0.1	2.9	0.94
114	2012	mCE2	168	147	275	100.3	100.0	7.7	7.9	0.3	4.0	0.87
115	2013	mCE2	117	221	376	99.6	99.5	6.9	6.9	0.1	4.4	0.80
116	2014	mCE2	83	315	456	100.4	99.1	5.7	6.6	1.3	5.7	0.57
117	2015	mCE2	71	329	421	99.4	98.1	7.9	7.1	1.3	6.6	0.62
118	2016	mCE2	70	288	424	99.8	99.7	7.0	4.8	0.1	6.5	0.45
119	2017	mCE2	66	269	386	100.2	99.7	5.0	4.1	0.6	4.5	0.53
120	2018	mCE2	38	149	207	101.3	99.8	5.9	3.7	1.5	6.2	0.21
121	2010	mCS2	42	85	134	98.6	98.5	9.0	8.7	0.1	2.3	0.97
122	2011	mCS2	44	65	72	101.5	100.3	10.8	10.0	1.2	4.8	0.90
123	2012	mCS2	57	82	114	100.2	100.4	10.5	9.6	-0.2	4.9	0.89
124	2013	mCS2	44	115	144	101.6	99.8	9.5	8.8	1.8	5.3	0.84
125	2014	mCS2	29	165	152	96.6	101.5	12.1	9.4	-4.9	10.0	0.59
126	2015	mCS2	32	144	126	98.1	99.3	10.7	7.5	-1.3	8.7	0.59
127	2016	mCS2	29	147	138	100.8	101.9	13.0	6.2	-1.1	10.5	0.60
128	2017	mCS2	28	140	127	100.6	100.9	7.5	6.4	-0.3	8.8	0.21
129	2018	mCS2	20	72	79	103.2	100.5	10.3	4.9	2.7	7.9	0.66
130	2010	brth	166	236	528	96.3	96.4	8.7	8.8	0.0	0.6	1.00
131	2011	brth	168	316	648	99.4	99.3	9.0	9.0	0.1	0.6	1.00
132	2012	brth	167	304	561	98.7	98.7	8.0	8.2	0.0	0.8	0.99
133	2013	brth	118	409	709	98.9	98.7	8.8	9.0	0.2	1.0	0.99
134	2014	brth	83	611	875	99.3	99.2	7.7	7.9	0.1	1.4	0.98
135	2015	brth	69	660	846	100.1	100.1	6.7	7.1	0.1	1.7	0.97
136	2016	brth	69	603	787	100.6	99.8	7.7	4.8	0.9	7.4	0.36
137	2017	brth	66	632	786	100.0	100.1	6.6	4.1	-0.1	5.8	0.49
138	2018	brth	52	697	981	100.1	98.8	5.4	3.4	1.4	5.8	0.20
139	2019	brth	48	562	619	101.0	100.4	8.1	3.2	0.6	7.8	0.27
140	2020	brth	52	579	676	102.1	99.1	6.8	2.6	3.1	5.9	0.50
141	2021	brth	36	301	288	101.7	99.6	6.4	2.2	2.1	6.7	0.03
142	2010	calv	165	210	497	98.7	99.0	9.4	9.8	-0.3	2.2	0.97
143	2011	calv	168	236	492	97.2	97.6	7.9	8.2	-0.4	3.0	0.93
144	2012	calv	169	231	413	99.1	99.1	7.3	7.5	0.0	4.0	0.86
145	2013	calv	122	320	532	100.3	100.4	6.8	6.9	-0.1	4.3	0.81
146	2014	calv	84	483	700	98.9	98.2	7.9	7.7	0.7	6.8	0.62
147	2015	calv	71	519	630	98.2	99.0	8.5	6.0	-0.7	8.0	0.43
148	2016	calv	70	489	709	98.6	99.0	7.5	5.0	-0.4	7.4	0.35

RDC breeding values for traditional full and reduc for nordic AI bulls with minimum 15 offspring in full

Obs	BYR	name	no	mean_noff	std_noff	mean_e	mean_re	std_e	std_re	mean_dif	std_dif	corr_SS
149	2017	calv	66	527	750	99.2	99.8	7.1	4.7	-0.6	6.8	0.38
150	2018	calv	52	499	715	99.1	99.6	6.8	4.9	-0.5	7.3	0.25
151	2019	calv	46	221	278	99.9	100.5	8.5	3.7	-0.6	8.3	0.27

RDC changes for EBV full and EBV reduc for nordic AI bulls with minimum 15 offspring in full, born >=2015

Obs	diff	d_brth	d_calv	p_brth	p_calv
1	-33	.	.	.	.
2	-31	.	.	.	.
3	-30	.	.	.	.
4	-29	.	.	.	.
5	-27	.	.	.	.
6	-26	.	1	.	0
7	-25	.	.	.	.
8	-24	.	.	.	.
9	-23	.	.	.	.
10	-22	.	.	.	.
11	-21	1	.	0	.
12	-20	1	1	0	0
13	-19	.	.	.	.
14	-18	2	.	1	.
15	-17	2	1	1	0
16	-16	.	3	.	1
17	-15	1	5	0	2
18	-14	2	5	1	2
19	-13	.	5	.	2
20	-12	.	10	.	3
21	-11	5	8	1	3
22	-10	7	4	2	1
23	-9	5	8	1	3
24	-8	5	4	1	1
25	-7	9	12	2	4
26	-6	8	6	2	2
27	-5	13	14	3	5
28	-4	16	11	4	4
29	-3	14	13	4	4
30	-2	20	11	5	4
31	-1	28	20	7	7
32	0	44	15	11	5
33	1	34	25	9	8
34	2	23	19	6	6
35	3	20	13	5	4
36	4	24	15	6	5

RDC changes for EBV full and EBV reduc for nordic AI bulls with minimum 15 offspring in full, born >=2015

Obs	diff	d_brth	d_calv	p_brth	p_calv
37	5	20	12	5	4
38	6	17	9	4	3
39	7	21	11	5	4
40	8	17	15	4	5
41	9	5	6	1	2
42	10	6	7	2	2
43	11	10	3	3	1
44	12	4	5	1	2
45	13	2	5	1	2
46	14	5	1	1	0
47	15	1	2	0	1
48	16	.	1	.	0
49	17	.	.	.	.
50	18	.	.	.	.
51	19	.	.	.	.
52	20	.	.	.	.
53	21	1	1	0	0
54	22	.	.	.	.
55	24	.	.	.	.
56	25	.	.	.	.
57	27	.	.	.	.

RDC changes for EBV full and EBV reduc for nordic AI bulls with minimum 15 offspring in full, born >=2015

Obs	diff	d_dSB1	d_dCE1	d_dCS1	d_dSB2	d_dCE2	d_dCS2
1	-33	.	.	.	.	.	1
2	-31	.	.	.	.	.	1
3	-30	.	.	.	1	.	.
4	-29	.	.	.	.	.	1
5	-27	.	.	1	.	.	.
6	-26	.	.	.	.	.	.
7	-25	.	.	2	.	.	1
8	-24	.	2	1	1	.	2
9	-23	.	.	.	.	.	2
10	-22	.	.	.	.	.	4
11	-21	1	.	.	.	.	2
12	-20	1	.	1	.	1	1
13	-19	.	1	2	.	.	2
14	-18	2	1	3	1	2	1
15	-17	.	1	4	2	.	1
16	-16	1	1	1	3	1	5
17	-15	1	.	3	1	2	4
18	-14	2	.	5	.	2	2
19	-13	2	3	1	1	3	5
20	-12	.	3	8	5	2	9
21	-11	5	3	4	1	2	5
22	-10	5	5	2	6	5	3
23	-9	5	4	6	7	7	7
24	-8	10	7	7	5	5	7
25	-7	12	6	4	6	3	9
26	-6	8	9	5	7	3	12
27	-5	10	14	7	12	9	4
28	-4	10	9	4	16	14	4
29	-3	18	16	9	23	17	9
30	-2	25	18	9	21	28	9
31	-1	31	25	10	31	28	18
32	0	38	46	21	37	39	21
33	1	36	32	19	34	33	14
34	2	26	21	8	30	21	9
35	3	21	21	10	25	26	10
36	4	20	19	7	26	19	8

RDC changes for EBV full and EBV reduc for nordic AI bulls with minimum 15 offspring in full, born >=2015

Obs	diff	d_dSB1	d_dCE1	d_dCS1	d_dSB2	d_dCE2	d_dCS2
37	5	16	26	4	18	29	6
38	6	15	15	2	20	24	8
39	7	15	18	4	15	16	5
40	8	16	16	5	12	8	4
41	9	7	7	5	13	14	6
42	10	16	11	3	6	8	10
43	11	5	10	4	2	8	7
44	12	4	8	2	4	4	1
45	13	3	6	5	3	9	3
46	14	4	4	.	2	1	1
47	15	1	.	1	4	3	2
48	16	.	1	2	1	3	2
49	17	.	.	2	.	1	2
50	18	.	1	2	.	.	1
51	19	.	1	.	1	1	.
52	20	1	1	.	.	.	.
53	21	.	1	.	.	.	1
54	22	.	.	.	.	.	2
55	24	.	.	1	.	.	1
56	25	.	.	1	.	.	.
57	27	.	.	.	.	.	.

RDC changes for EBV full and EBV reduc for nordic AI bulls with minimum 15 offspring in full, born >=2015

Obs	diff	d_mSB1	d_mCE1	d_mCS1	d_mSB2	d_mCE2	d_mCS2
1	-33	.	.	.	.	.	.
2	-31	.	.	.	.	.	.
3	-30	.	.	.	.	.	1
4	-29	.	1	.	.	.	.
5	-27	.	.	.	.	.	.
6	-26	.	.	.	.	.	.
7	-25	2	.	1	.	.	.
8	-24	1	1	1	1	.	1
9	-23	.	.	.	1	.	.
10	-22	.	.	2	1	.	1
11	-21	.	.	.	1	.	.
12	-20	.	.	.	.	.	.
13	-19	1	.	1	2	.	1
14	-18	2	1	1	2	.	.
15	-17	2	1	1	2	.	1
16	-16	.	.	2	3	.	2
17	-15	2	2	4	2	1	.
18	-14	1	.	6	5	1	.
19	-13	7	.	6	5	3	6
20	-12	2	2	3	7	2	.
21	-11	6	9	.	4	2	4
22	-10	8	1	2	2	3	1
23	-9	7	9	4	9	4	3
24	-8	6	6	4	8	5	3
25	-7	8	6	6	8	4	2
26	-6	14	7	3	6	7	2
27	-5	8	10	7	14	13	2
28	-4	17	11	4	6	14	3
29	-3	19	19	5	6	18	4
30	-2	10	15	10	12	9	3
31	-1	7	13	9	15	18	4
32	0	14	16	4	20	12	9
33	1	15	25	4	13	15	4
34	2	20	17	8	17	14	6
35	3	20	20	2	8	15	6
36	4	20	12	3	9	13	4

RDC changes for EBV full and EBV reduc for nordic AI bulls with minimum 15 offspring in full, born >=2015

Obs	diff	d_mSB1	d_mCE1	d_mCS1	d_mSB2	d_mCE2	d_mCS2
37	5	15	13	4	7	17	6
38	6	17	14	7	9	18	6
39	7	11	14	10	4	7	4
40	8	9	19	4	5	8	4
41	9	9	10	3	9	4	5
42	10	6	9	5	8	8	2
43	11	8	5	5	5	2	3
44	12	2	7	5	2	2	.
45	13	5	2	4	1	4	3
46	14	2	3	3	1	1	1
47	15	3	.	2	2	1	.
48	16	.	2	1	2	.	1
49	17	1	.	.	.	1	1
50	18	.	1	2	.	.	.
51	19	.	2	.	.	.	.
52	20	.	.	1	2	.	1
53	21	.	.	.	.	.	.
54	22	.	1	.	.	.	.
55	24	.	.	.	.	.	.
56	25	.	.	.	.	.	.
57	27	.	.	.	1	.	.

RDC changes for EBV full and EBV reduc for nordic AI bulls with minimum 15 offspring in full, born >=2015

Obs	diff	p_dSB1	p_dCE1	p_dCS1	p_dSB2	p_dCE2	p_dCS2
1	-33	.	.	.	.	.	0
2	-31	.	.	.	.	.	0
3	-30	.	.	.	0	.	.
4	-29	.	.	.	.	.	0
5	-27	.	.	0	.	.	.
6	-26	.	.	.	.	.	.
7	-25	.	.	1	.	.	0
8	-24	.	1	0	0	.	1
9	-23	.	.	.	.	.	1
10	-22	.	.	.	.	.	2
11	-21	0	.	.	.	.	1
12	-20	0	.	0	.	0	0
13	-19	.	0	1	.	.	1
14	-18	1	0	1	0	0	0
15	-17	.	0	2	0	.	0
16	-16	0	0	0	1	0	2
17	-15	0	.	1	0	0	2
18	-14	1	.	2	.	0	1
19	-13	1	1	0	0	1	2
20	-12	.	1	4	1	0	4
21	-11	1	1	2	0	0	2
22	-10	1	1	1	1	1	1
23	-9	1	1	3	2	2	3
24	-8	3	2	3	1	1	3
25	-7	3	2	2	1	1	4
26	-6	2	2	2	2	1	5
27	-5	3	4	3	3	2	2
28	-4	3	2	2	4	3	2
29	-3	5	4	4	6	4	4
30	-2	6	5	4	5	7	4
31	-1	8	6	5	8	7	7
32	0	10	12	10	9	10	8
33	1	9	8	9	8	8	5
34	2	7	5	4	7	5	4
35	3	5	5	5	6	6	4
36	4	5	5	3	6	5	3

RDC changes for EBV full and EBV reduc for nordic AI bulls with minimum 15 offspring in full, born >=2015

Obs	diff	p_dSB1	p_dCE1	p_dCS1	p_dSB2	p_dCE2	p_dCS2
37	5	4	7	2	4	7	2
38	6	4	4	1	5	6	3
39	7	4	5	2	4	4	2
40	8	4	4	2	3	2	2
41	9	2	2	2	3	3	2
42	10	4	3	1	1	2	4
43	11	1	3	2	0	2	3
44	12	1	2	1	1	1	0
45	13	1	2	2	1	2	1
46	14	1	1	.	0	0	0
47	15	0	.	0	1	1	1
48	16	.	0	1	0	1	1
49	17	.	.	1	.	0	1
50	18	.	0	1	.	.	0
51	19	.	0	.	0	0	.
52	20	0	0	.	.	.	.
53	21	.	0	.	.	.	0
54	22	.	.	.	.	.	1
55	24	.	.	0	.	.	0
56	25	.	.	0	.	.	.
57	27	.	.	.	.	.	.

RDC changes for EBV full and EBV reduc for nordic AI bulls with minimum 15 offspring in full, born >=2015

Obs	diff	p_mSB1	p_mCE1	p_mCS1	p_mSB2	p_mCE2	p_mCS2
1	-33	.	.	.	.	.	.
2	-31	.	.	.	.	.	.
3	-30	.	.	.	.	.	1
4	-29	.	0	.	.	.	.
5	-27	.	.	.	.	.	.
6	-26	.	.	.	.	.	.
7	-25	1	.	1	.	.	.
8	-24	0	0	1	0	.	1
9	-23	.	.	.	0	.	.
10	-22	.	.	1	0	.	1
11	-21	.	.	.	0	.	.
12	-20	.	.	.	.	.	.
13	-19	0	.	1	1	.	1
14	-18	1	0	1	1	.	.
15	-17	1	0	1	1	.	1
16	-16	.	.	1	1	.	2
17	-15	1	1	3	1	0	.
18	-14	0	.	4	2	0	.
19	-13	2	.	4	2	1	5
20	-12	1	1	2	3	1	.
21	-11	2	3	.	2	1	4
22	-10	3	0	1	1	1	1
23	-9	2	3	3	4	2	3
24	-8	2	2	3	3	2	3
25	-7	3	2	4	3	2	2
26	-6	5	2	2	2	3	2
27	-5	3	3	4	6	5	2
28	-4	6	4	3	2	6	3
29	-3	6	6	3	2	7	4
30	-2	3	5	6	5	4	3
31	-1	2	4	6	6	7	4
32	0	5	5	3	8	5	8
33	1	5	8	3	5	6	4
34	2	7	6	5	7	6	5
35	3	7	7	1	3	6	5
36	4	7	4	2	4	5	4

RDC changes for EBV full and EBV reduc for nordic AI bulls with minimum 15 offspring in full, born >=2015

Obs	diff	p_mSB1	p_mCE1	p_mCS1	p_mSB2	p_mCE2	p_mCS2
37	5	5	4	3	3	7	5
38	6	6	5	4	4	7	5
39	7	4	5	6	2	3	4
40	8	3	6	3	2	3	4
41	9	3	3	2	4	2	5
42	10	2	3	3	3	3	2
43	11	3	2	3	2	1	3
44	12	1	2	3	1	1	.
45	13	2	1	3	0	2	3
46	14	1	1	2	0	0	1
47	15	1	.	1	1	0	.
48	16	.	1	1	1	.	1
49	17	0	.	.	.	0	1
50	18	.	0	1	.	.	.
51	19	.	1	.	.	.	.
52	20	.	.	1	1	.	1
53	21	.	.	.	.	.	.
54	22	.	0	.	.	.	.
55	24	.	.	.	.	.	.
56	25	.	.	.	.	.	.
57	27	.	.	.	0	.	.

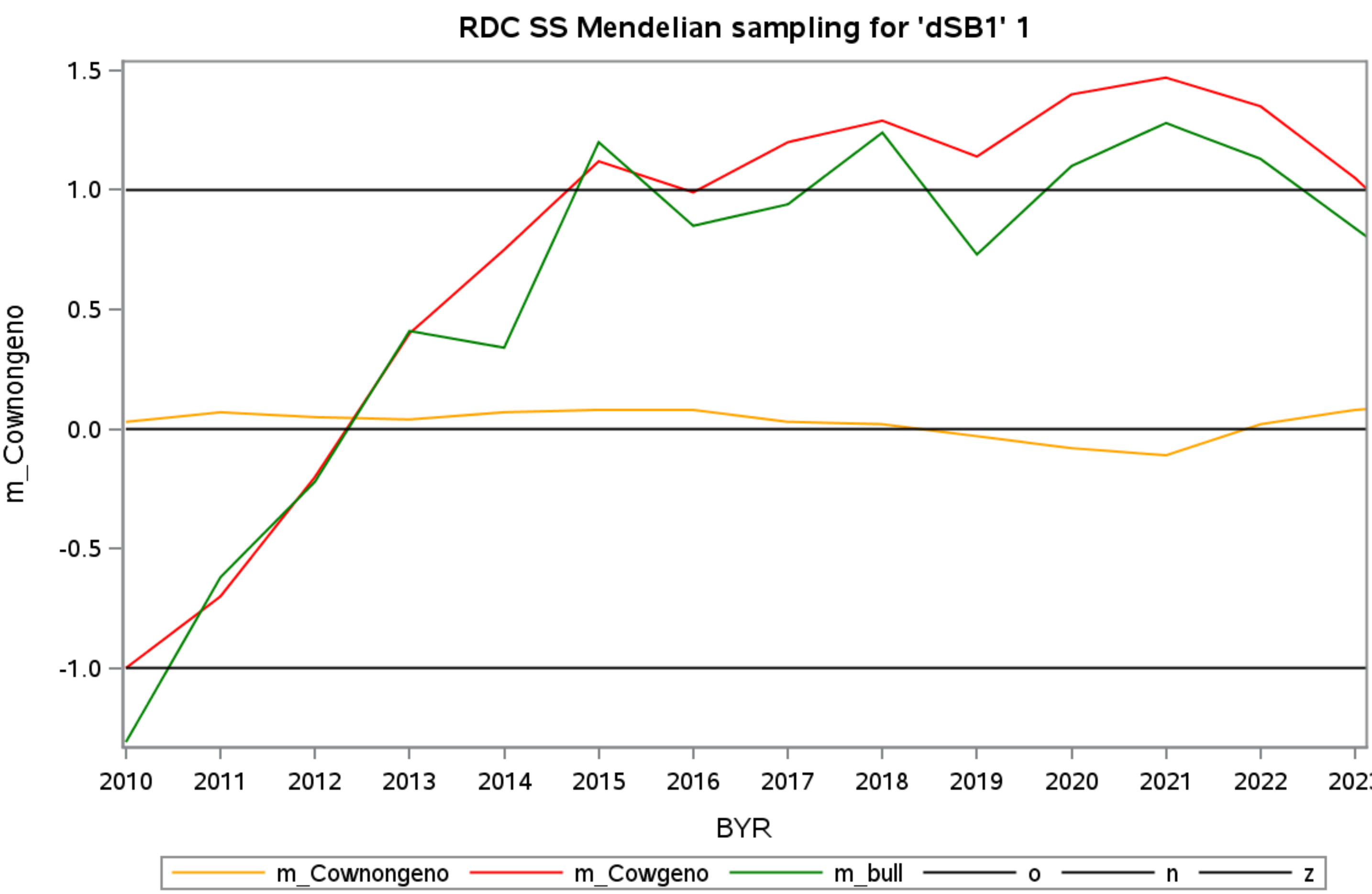
RDC Legarra Reverter regression for SS for bulls, born after 2015 and with minimum 15 offspring in full and no offspring in reduc

Obs	status	t	name	no	b1	rsq
1	1&2	1	dSB1	330	0.71	0.27
2	1&2	2	dCE1	330	0.91	0.48
3	1&2	3	dCS1	172	0.97	0.44
4	1&2	4	dSB2	341	0.71	0.26
5	1&2	5	dCE2	339	0.89	0.47
6	1&2	6	dCS2	212	1.01	0.48
7	1&2	7	mSB1	241	0.66	0.24
8	1&2	8	mCE1	240	0.77	0.39
9	1&2	9	mCS1	122	0.96	0.37
10	1&2	10	mSB2	177	0.64	0.24
11	1&2	11	mCE2	176	0.64	0.36
12	1&2	12	mCS2	77	0.94	0.33
13	1&2	13	brth	330	0.75	0.30
14	1&2	14	calv	241	0.60	0.22

RDC Legarra Reverter regression for EBV for bulls, born after 2015 and with minimum 15 offspring in full and no offspring in reduc

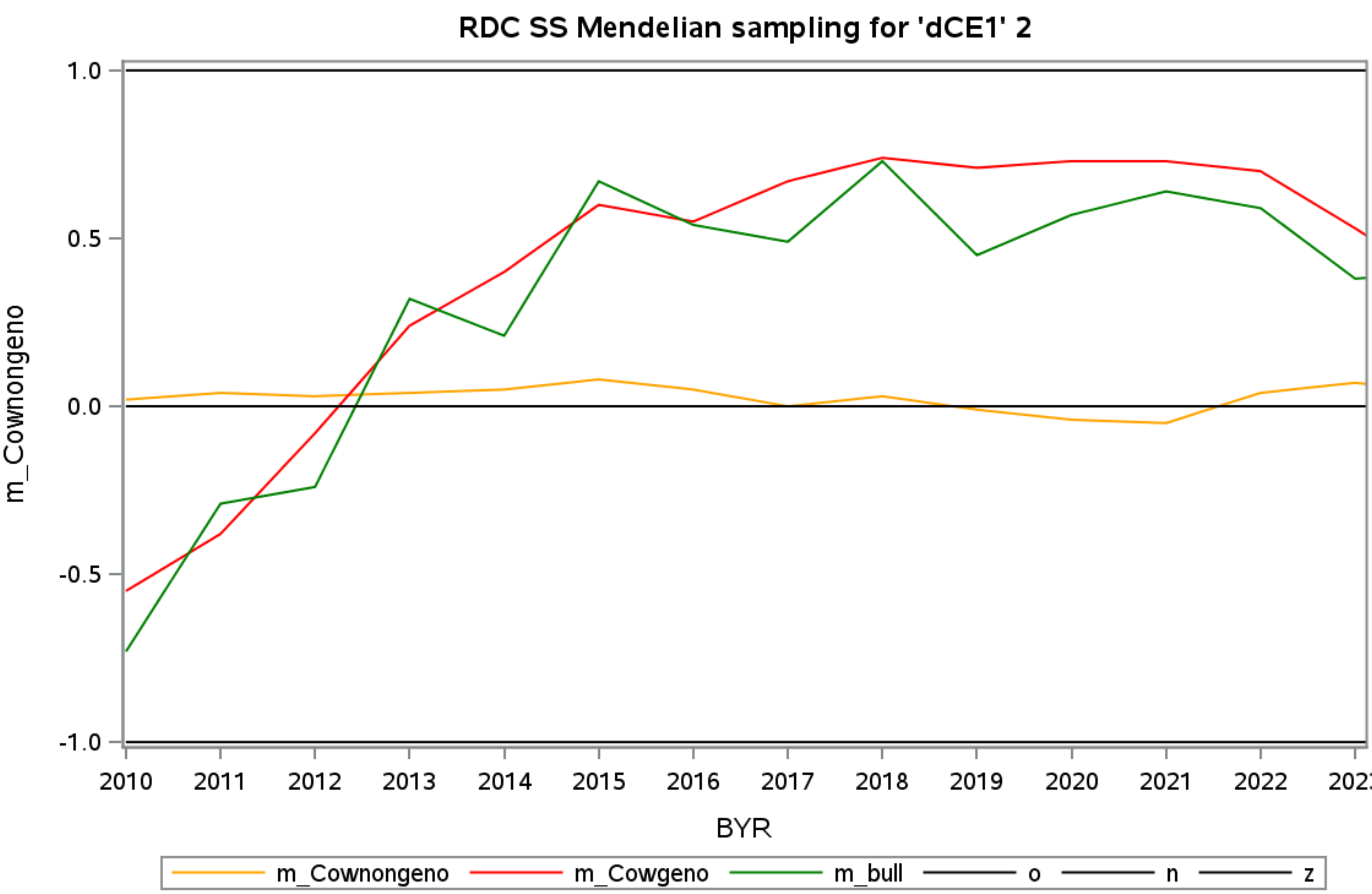
Obs	status	t	name	no	b1	rsq
1	1&2	1	dSB1	330	0.66	0.12
2	1&2	2	dCE1	330	0.75	0.19
3	1&2	3	dCS1	172	0.75	0.13
4	1&2	4	dSB2	341	0.59	0.10
5	1&2	5	dCE2	339	0.78	0.19
6	1&2	6	dCS2	212	0.76	0.14
7	1&2	7	mSB1	241	0.58	0.11
8	1&2	8	mCE1	240	0.66	0.20
9	1&2	9	mCS1	122	0.92	0.28
10	1&2	10	mSB2	177	0.45	0.07
11	1&2	11	mCE2	176	0.61	0.19
12	1&2	12	mCS2	77	0.82	0.22
13	1&2	13	brth	330	0.64	0.12
14	1&2	14	calv	241	0.49	0.09

Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	0.03	-1.00	-1.31	76585	2302	696
2	2011	0.07	-0.70	-0.62	72324	4327	1130
3	2012	0.05	-0.20	-0.22	65311	5074	1420
4	2013	0.04	0.40	0.41	62402	5619	1520
5	2014	0.07	0.75	0.34	57824	6290	1685
6	2015	0.08	1.12	1.20	51438	8306	1903
7	2016	0.08	0.99	0.85	43973	11236	1869
8	2017	0.03	1.20	0.94	36024	14397	2108
9	2018	0.02	1.29	1.24	30486	16542	2060
10	2019	-0.03	1.14	0.73	26086	16991	1996
11	2020	-0.08	1.40	1.10	22462	18776	2395
12	2021	-0.11	1.47	1.28	19565	19520	2364
13	2022	0.02	1.35	1.13	16414	20660	2252
14	2023	0.08	1.05	0.84	14457	18544	1998
15	2024	0.11	0.68	0.55	3300	4211	590



RDC SS Mendelian sampling for 'dCE1' 2

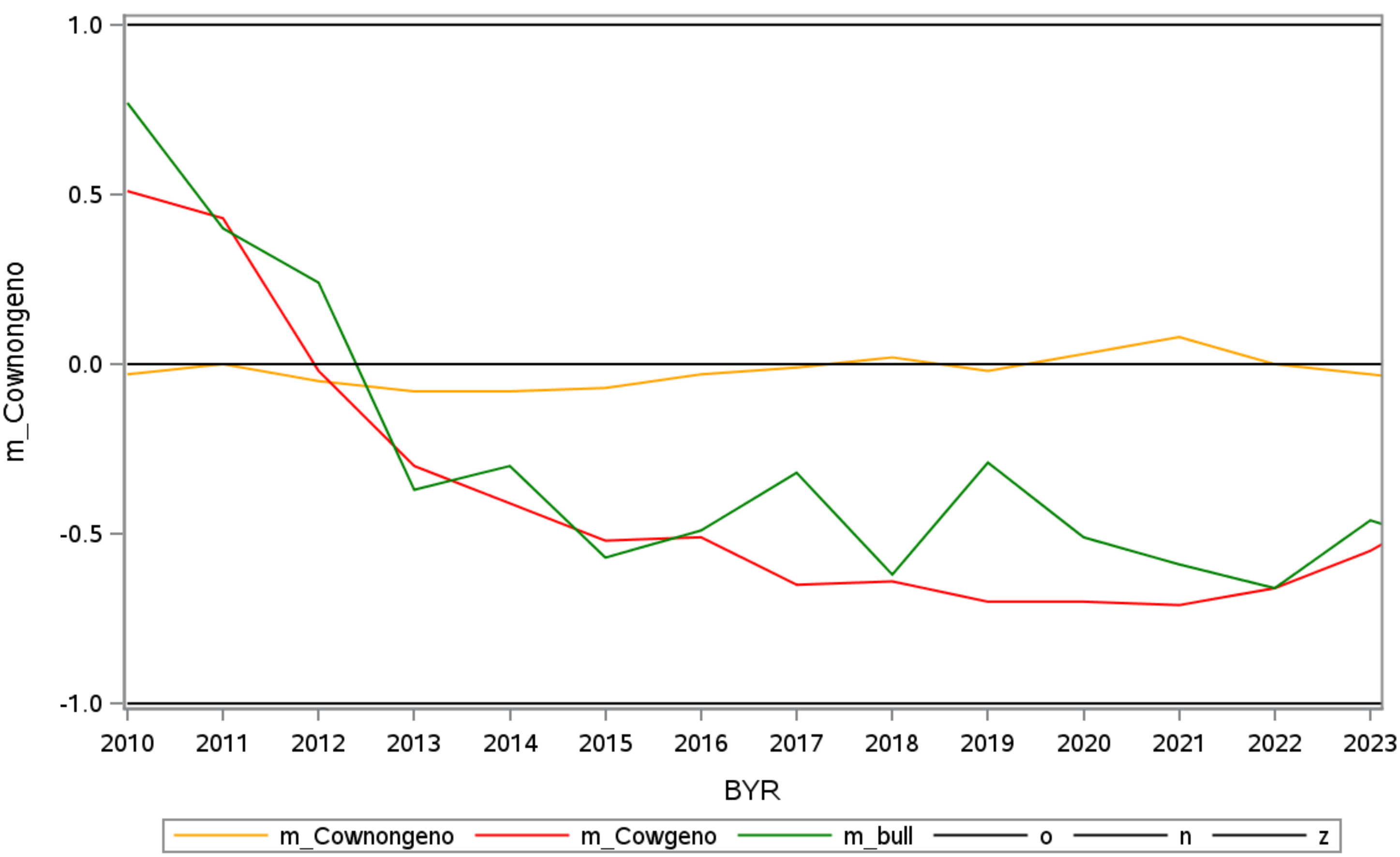
Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	0.02	-0.55	-0.73	76585	2302	696
2	2011	0.04	-0.38	-0.29	72324	4327	1130
3	2012	0.03	-0.08	-0.24	65311	5074	1420
4	2013	0.04	0.24	0.32	62402	5619	1520
5	2014	0.05	0.40	0.21	57824	6290	1685
6	2015	0.08	0.60	0.67	51438	8306	1903
7	2016	0.05	0.55	0.54	43973	11236	1869
8	2017	0.00	0.67	0.49	36024	14397	2108
9	2018	0.03	0.74	0.73	30486	16542	2060
10	2019	-0.01	0.71	0.45	26086	16991	1996
11	2020	-0.04	0.73	0.57	22462	18776	2395
12	2021	-0.05	0.73	0.64	19565	19520	2364
13	2022	0.04	0.70	0.59	16414	20660	2252
14	2023	0.07	0.53	0.38	14457	18544	1998
15	2024	0.04	0.35	0.40	3300	4211	590



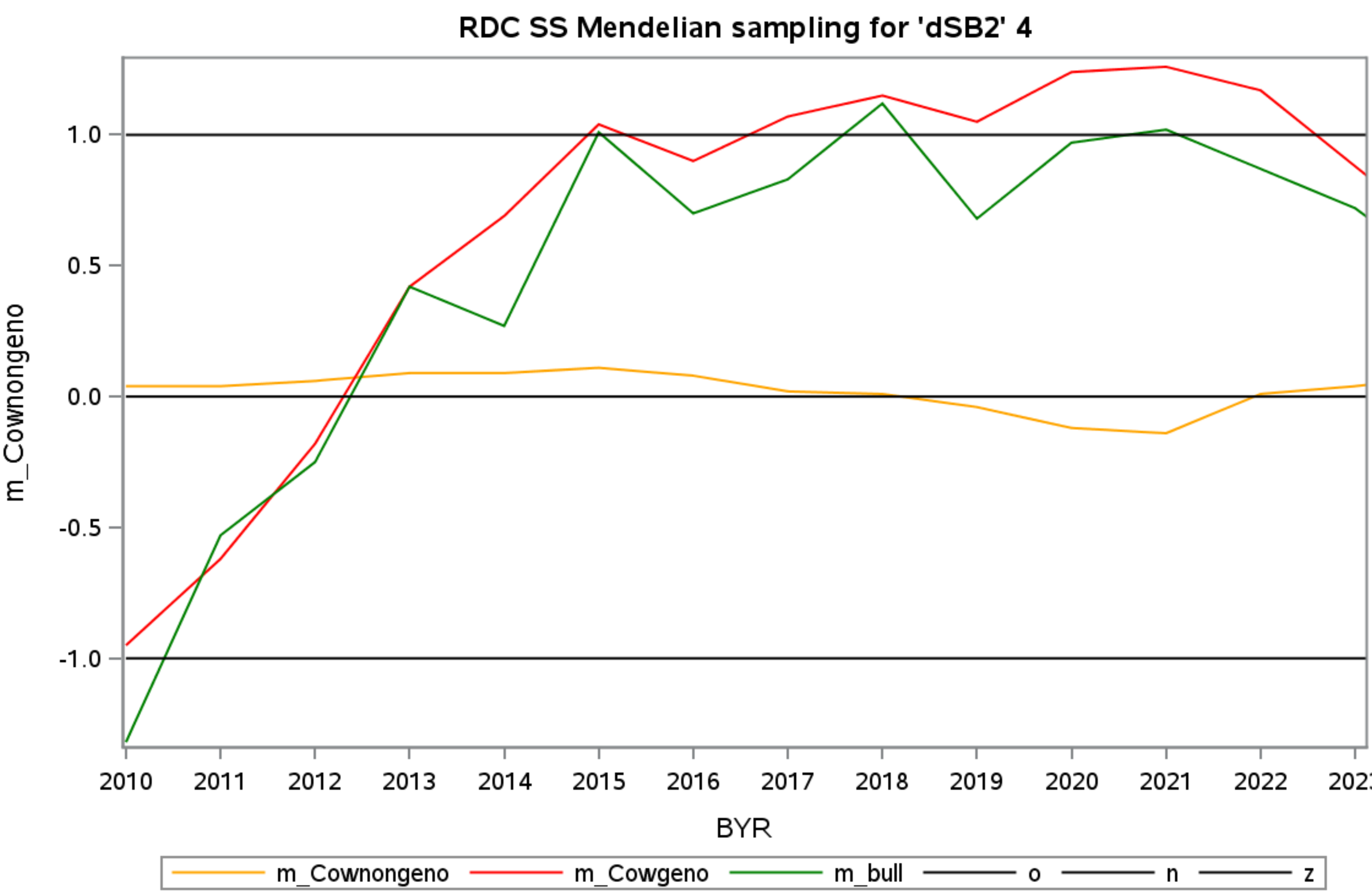
RDC SS Mendelian sampling for 'dCS1' 3

Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	-0.03	0.51	0.77	76585	2302	696
2	2011	0.00	0.43	0.40	72324	4327	1130
3	2012	-0.05	-0.02	0.24	65311	5074	1420
4	2013	-0.08	-0.30	-0.37	62402	5619	1520
5	2014	-0.08	-0.41	-0.30	57824	6290	1685
6	2015	-0.07	-0.52	-0.57	51438	8306	1903
7	2016	-0.03	-0.51	-0.49	43973	11236	1869
8	2017	-0.01	-0.65	-0.32	36024	14397	2108
9	2018	0.02	-0.64	-0.62	30486	16542	2060
10	2019	-0.02	-0.70	-0.29	26086	16991	1996
11	2020	0.03	-0.70	-0.51	22462	18776	2395
12	2021	0.08	-0.71	-0.59	19565	19520	2364
13	2022	0.00	-0.66	-0.66	16414	20660	2252
14	2023	-0.03	-0.55	-0.46	14457	18544	1998
15	2024	-0.06	-0.39	-0.55	3300	4211	590

RDC SS Mendelian sampling for 'dCS1' 3

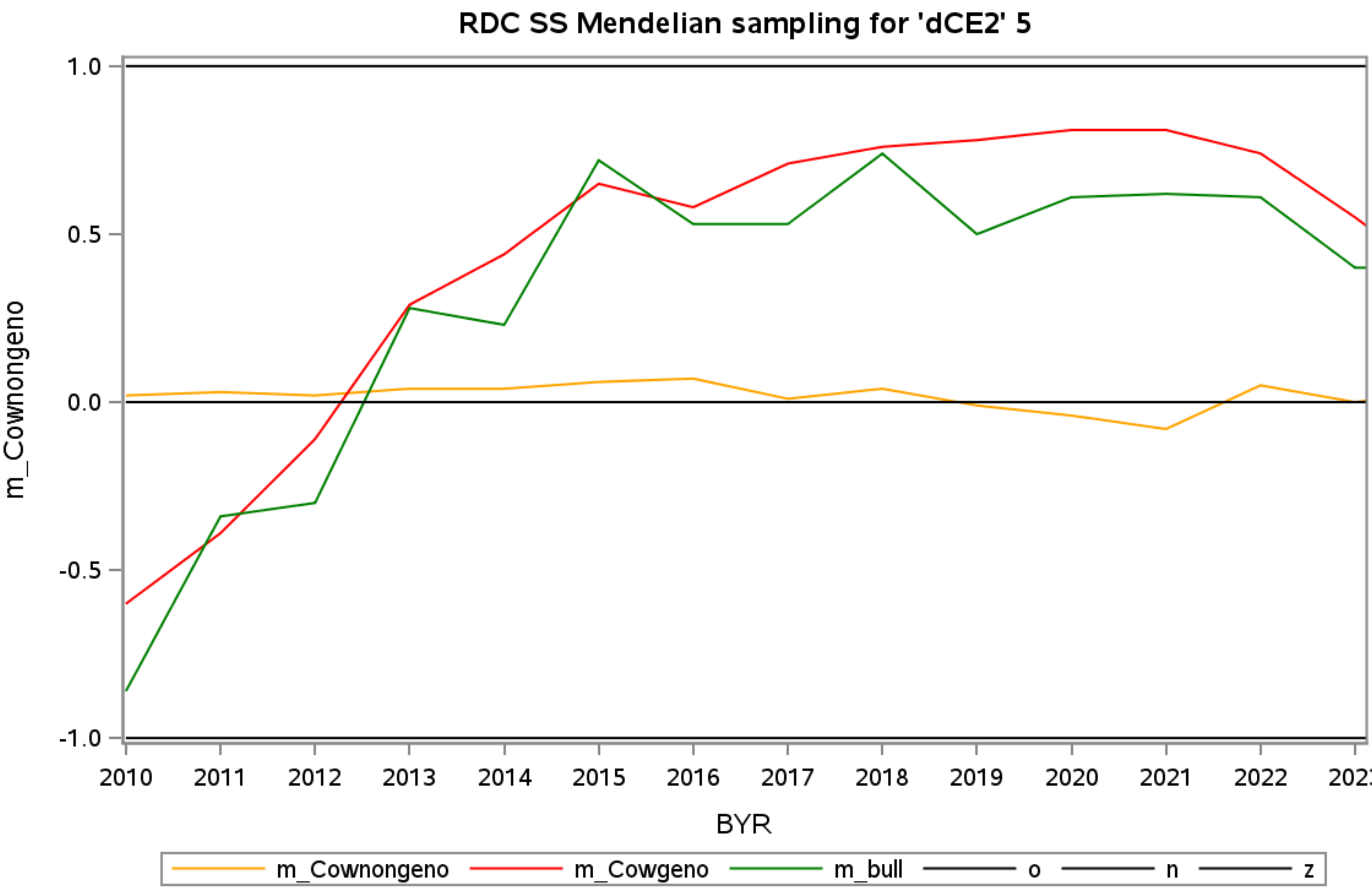


Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	0.04	-0.95	-1.32	76585	2302	696
2	2011	0.04	-0.62	-0.53	72324	4327	1130
3	2012	0.06	-0.18	-0.25	65311	5074	1420
4	2013	0.09	0.42	0.42	62402	5619	1520
5	2014	0.09	0.69	0.27	57824	6290	1685
6	2015	0.11	1.04	1.01	51438	8306	1903
7	2016	0.08	0.90	0.70	43973	11236	1869
8	2017	0.02	1.07	0.83	36024	14397	2108
9	2018	0.01	1.15	1.12	30486	16542	2060
10	2019	-0.04	1.05	0.68	26086	16991	1996
11	2020	-0.12	1.24	0.97	22462	18776	2395
12	2021	-0.14	1.26	1.02	19565	19520	2364
13	2022	0.01	1.17	0.87	16414	20660	2252
14	2023	0.04	0.88	0.72	14457	18544	1998
15	2024	0.08	0.59	0.45	3300	4211	590



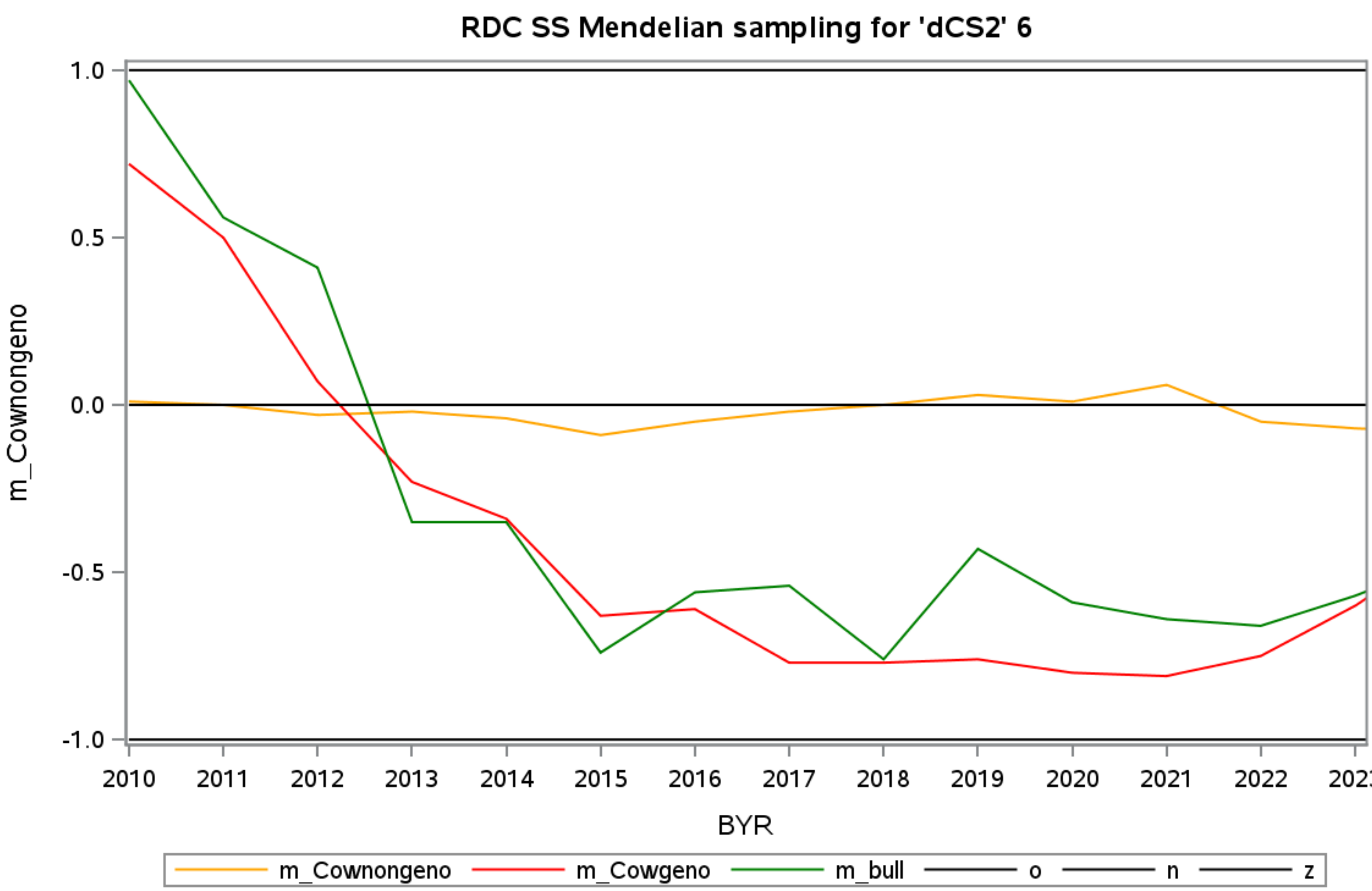
RDC SS Mendelian sampling for 'dCE2' 5

Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	0.02	-0.60	-0.86	76585	2302	696
2	2011	0.03	-0.39	-0.34	72324	4327	1130
3	2012	0.02	-0.11	-0.30	65311	5074	1420
4	2013	0.04	0.29	0.28	62402	5619	1520
5	2014	0.04	0.44	0.23	57824	6290	1685
6	2015	0.06	0.65	0.72	51438	8306	1903
7	2016	0.07	0.58	0.53	43973	11236	1869
8	2017	0.01	0.71	0.53	36024	14397	2108
9	2018	0.04	0.76	0.74	30486	16542	2060
10	2019	-0.01	0.78	0.50	26086	16991	1996
11	2020	-0.04	0.81	0.61	22462	18776	2395
12	2021	-0.08	0.81	0.62	19565	19520	2364
13	2022	0.05	0.74	0.61	16414	20660	2252
14	2023	0.00	0.55	0.40	14457	18544	1998
15	2024	0.04	0.34	0.40	3300	4211	590

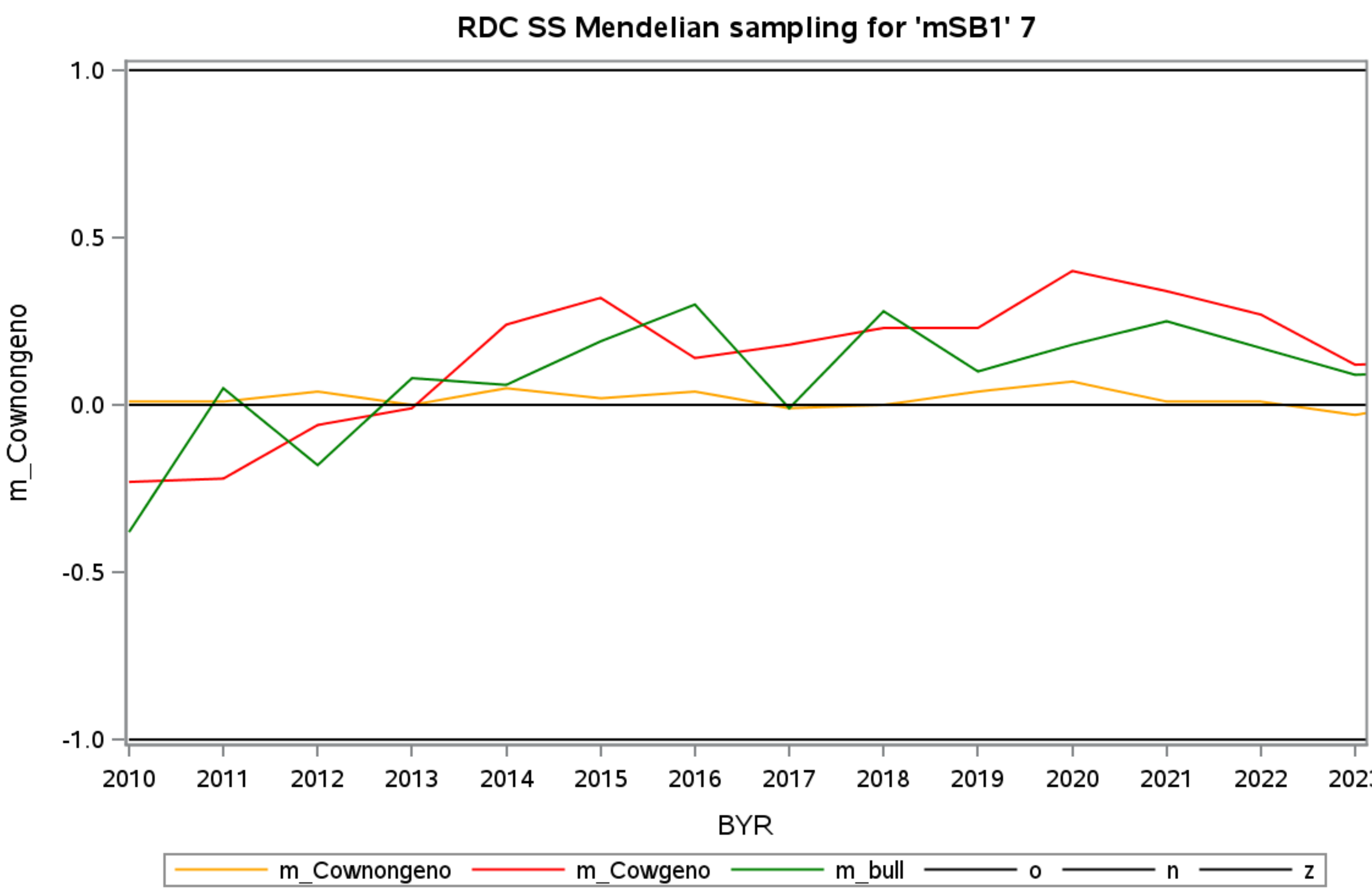


RDC SS Mendelian sampling for 'dCS2' 6

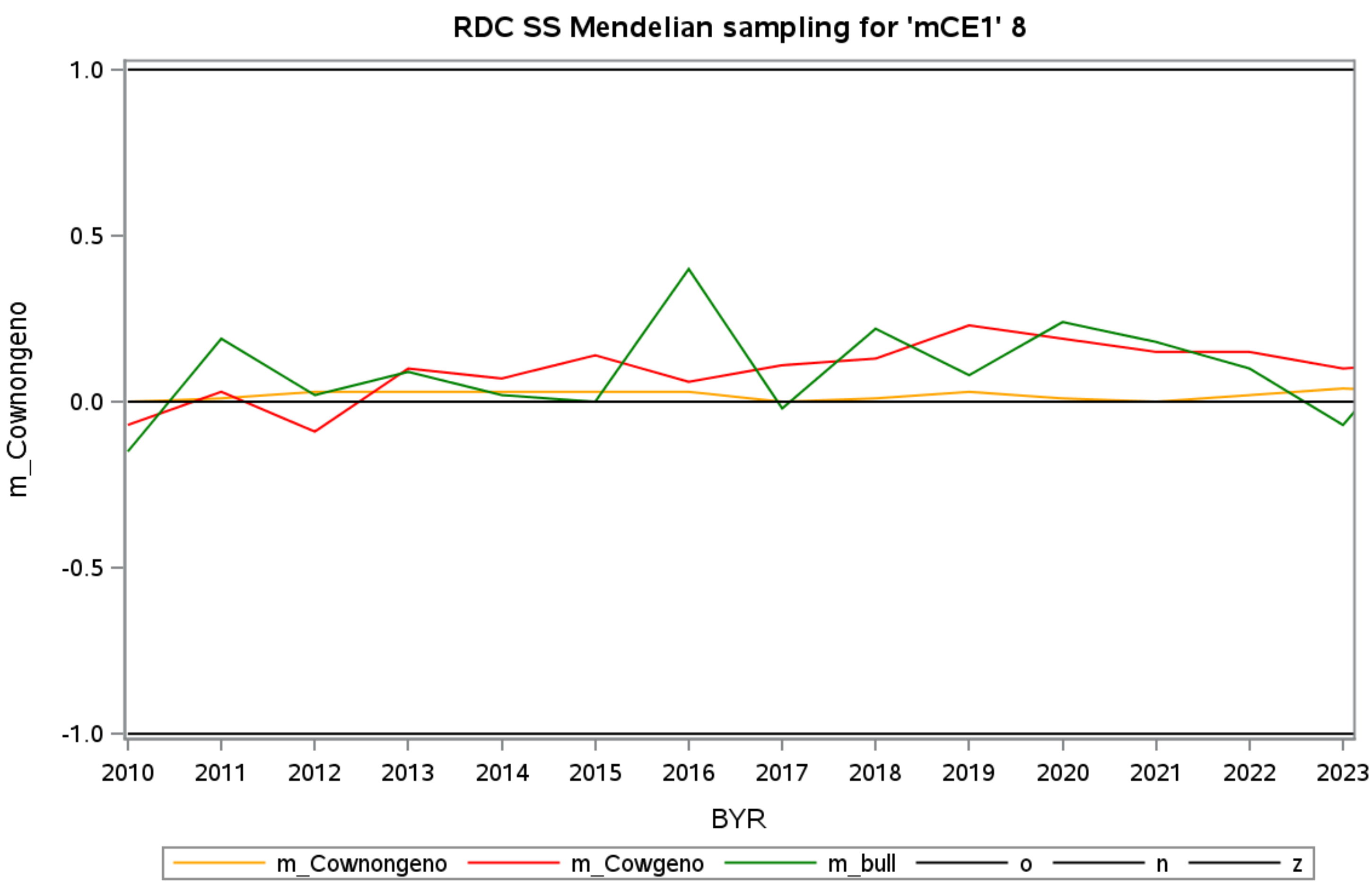
Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	0.01	0.72	0.97	76585	2302	696
2	2011	0.00	0.50	0.56	72324	4327	1130
3	2012	-0.03	0.07	0.41	65311	5074	1420
4	2013	-0.02	-0.23	-0.35	62402	5619	1520
5	2014	-0.04	-0.34	-0.35	57824	6290	1685
6	2015	-0.09	-0.63	-0.74	51438	8306	1903
7	2016	-0.05	-0.61	-0.56	43973	11236	1869
8	2017	-0.02	-0.77	-0.54	36024	14397	2108
9	2018	0.00	-0.77	-0.76	30486	16542	2060
10	2019	0.03	-0.76	-0.43	26086	16991	1996
11	2020	0.01	-0.80	-0.59	22462	18776	2395
12	2021	0.06	-0.81	-0.64	19565	19520	2364
13	2022	-0.05	-0.75	-0.66	16414	20660	2252
14	2023	-0.07	-0.60	-0.57	14457	18544	1998
15	2024	-0.08	-0.41	-0.46	3300	4211	590



Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	0.01	-0.23	-0.38	76585	2302	696
2	2011	0.01	-0.22	0.05	72324	4327	1130
3	2012	0.04	-0.06	-0.18	65311	5074	1420
4	2013	0.00	-0.01	0.08	62402	5619	1520
5	2014	0.05	0.24	0.06	57824	6290	1685
6	2015	0.02	0.32	0.19	51438	8306	1903
7	2016	0.04	0.14	0.30	43973	11236	1869
8	2017	-0.01	0.18	-0.01	36024	14397	2108
9	2018	0.00	0.23	0.28	30486	16542	2060
10	2019	0.04	0.23	0.10	26086	16991	1996
11	2020	0.07	0.40	0.18	22462	18776	2395
12	2021	0.01	0.34	0.25	19565	19520	2364
13	2022	0.01	0.27	0.17	16414	20660	2252
14	2023	-0.03	0.12	0.09	14457	18544	1998
15	2024	0.02	0.13	0.10	3300	4211	590

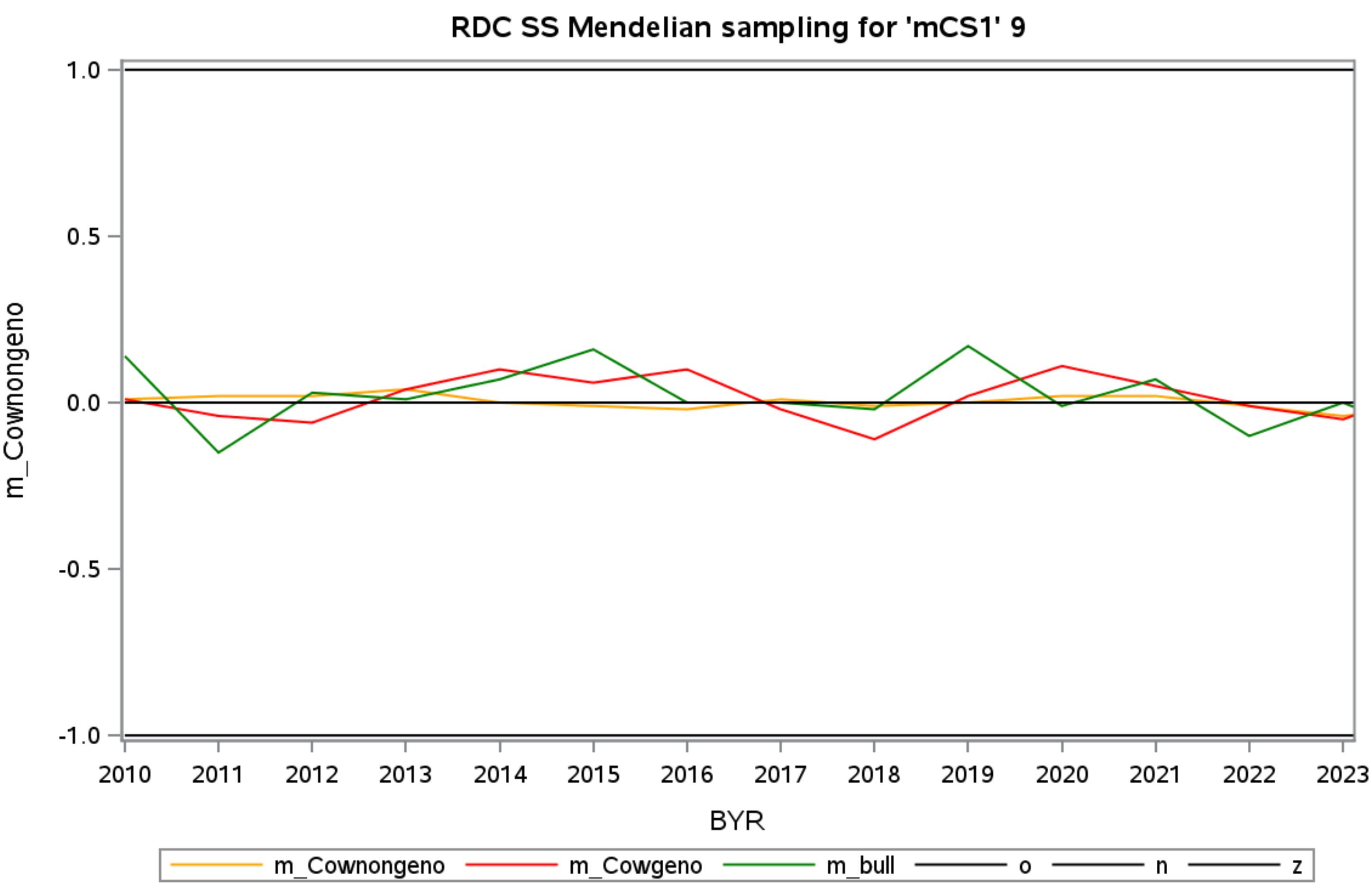


Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	0.00	-0.07	-0.15	76585	2302	696
2	2011	0.01	0.03	0.19	72324	4327	1130
3	2012	0.03	-0.09	0.02	65311	5074	1420
4	2013	0.03	0.10	0.09	62402	5619	1520
5	2014	0.03	0.07	0.02	57824	6290	1685
6	2015	0.03	0.14	0.00	51438	8306	1903
7	2016	0.03	0.06	0.40	43973	11236	1869
8	2017	0.00	0.11	-0.02	36024	14397	2108
9	2018	0.01	0.13	0.22	30486	16542	2060
10	2019	0.03	0.23	0.08	26086	16991	1996
11	2020	0.01	0.19	0.24	22462	18776	2395
12	2021	0.00	0.15	0.18	19565	19520	2364
13	2022	0.02	0.15	0.10	16414	20660	2252
14	2023	0.04	0.10	-0.07	14457	18544	1998
15	2024	0.03	0.12	0.26	3300	4211	590

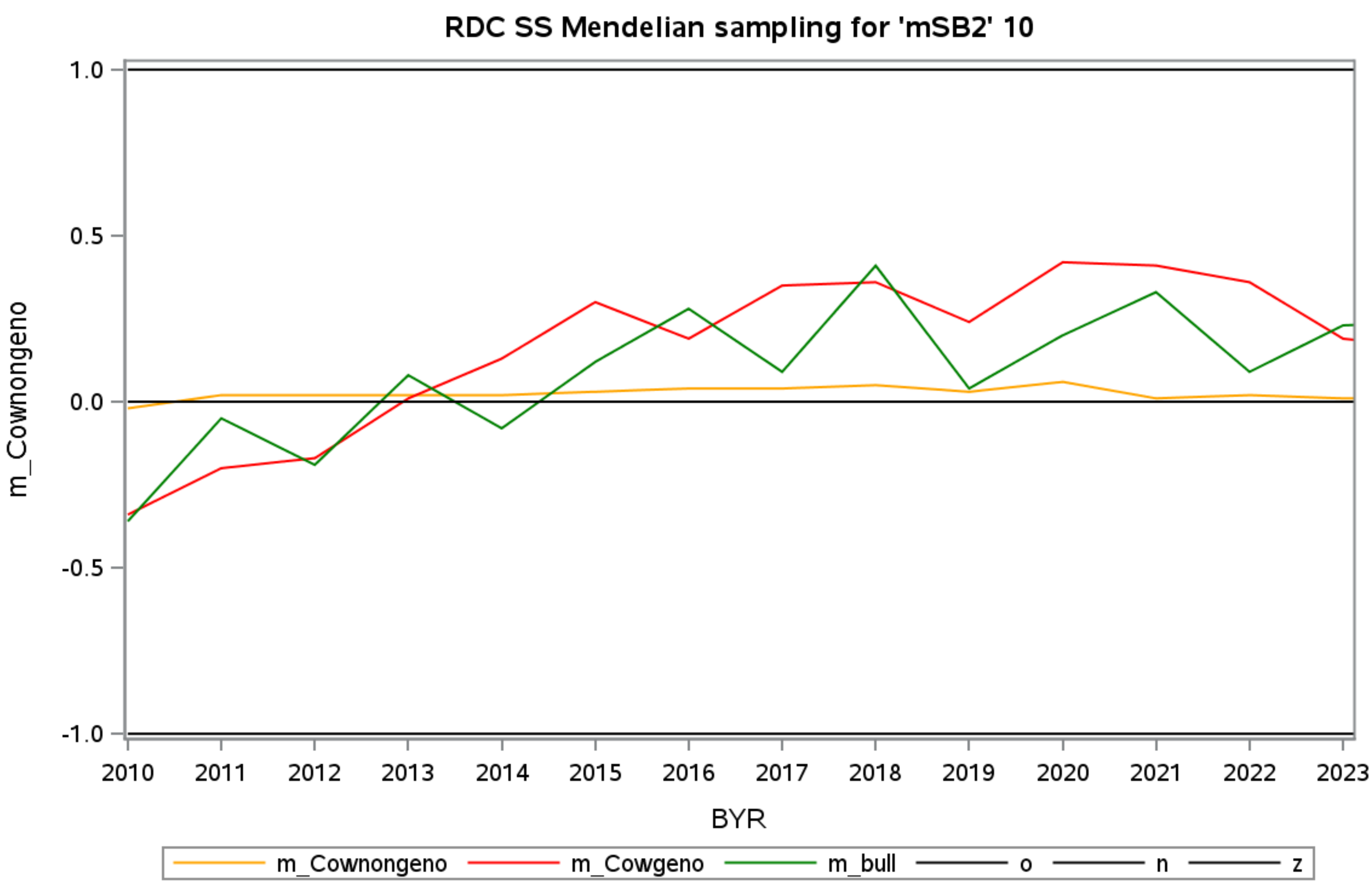


RDC SS Mendelian sampling for 'mCS1' 9

Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	0.01	0.01	0.14	76585	2302	696
2	2011	0.02	-0.04	-0.15	72324	4327	1130
3	2012	0.02	-0.06	0.03	65311	5074	1420
4	2013	0.04	0.04	0.01	62402	5619	1520
5	2014	0.00	0.10	0.07	57824	6290	1685
6	2015	-0.01	0.06	0.16	51438	8306	1903
7	2016	-0.02	0.10	0.00	43973	11236	1869
8	2017	0.01	-0.02	0.00	36024	14397	2108
9	2018	-0.01	-0.11	-0.02	30486	16542	2060
10	2019	0.00	0.02	0.17	26086	16991	1996
11	2020	0.02	0.11	-0.01	22462	18776	2395
12	2021	0.02	0.05	0.07	19565	19520	2364
13	2022	-0.01	-0.01	-0.10	16414	20660	2252
14	2023	-0.04	-0.05	0.00	14457	18544	1998
15	2024	-0.01	0.05	-0.11	3300	4211	590

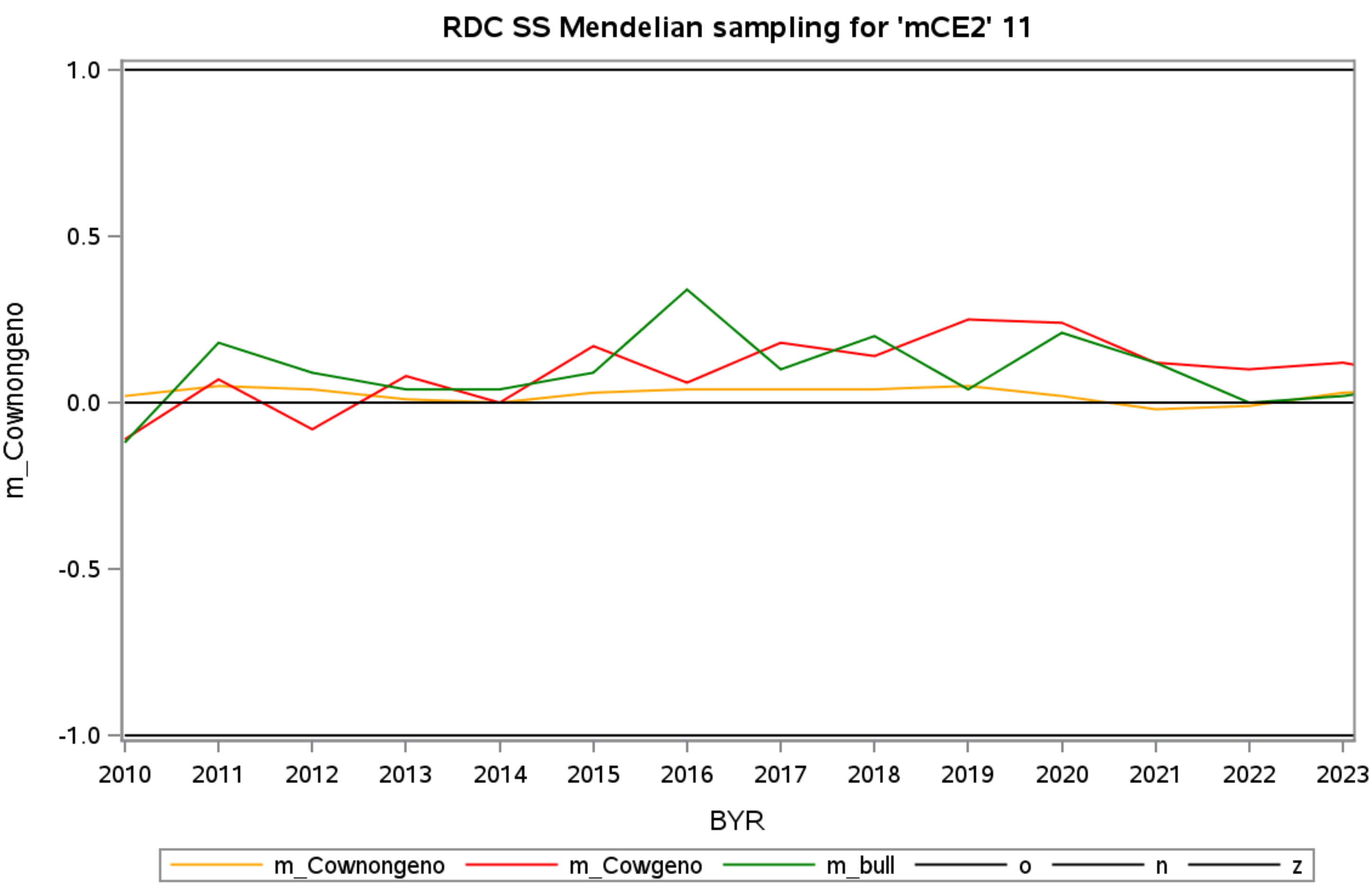


Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	-0.02	-0.34	-0.36	76585	2302	696
2	2011	0.02	-0.20	-0.05	72324	4327	1130
3	2012	0.02	-0.17	-0.19	65311	5074	1420
4	2013	0.02	0.01	0.08	62402	5619	1520
5	2014	0.02	0.13	-0.08	57824	6290	1685
6	2015	0.03	0.30	0.12	51438	8306	1903
7	2016	0.04	0.19	0.28	43973	11236	1869
8	2017	0.04	0.35	0.09	36024	14397	2108
9	2018	0.05	0.36	0.41	30486	16542	2060
10	2019	0.03	0.24	0.04	26086	16991	1996
11	2020	0.06	0.42	0.20	22462	18776	2395
12	2021	0.01	0.41	0.33	19565	19520	2364
13	2022	0.02	0.36	0.09	16414	20660	2252
14	2023	0.01	0.19	0.23	14457	18544	1998
15	2024	0.01	0.16	0.24	3300	4211	590



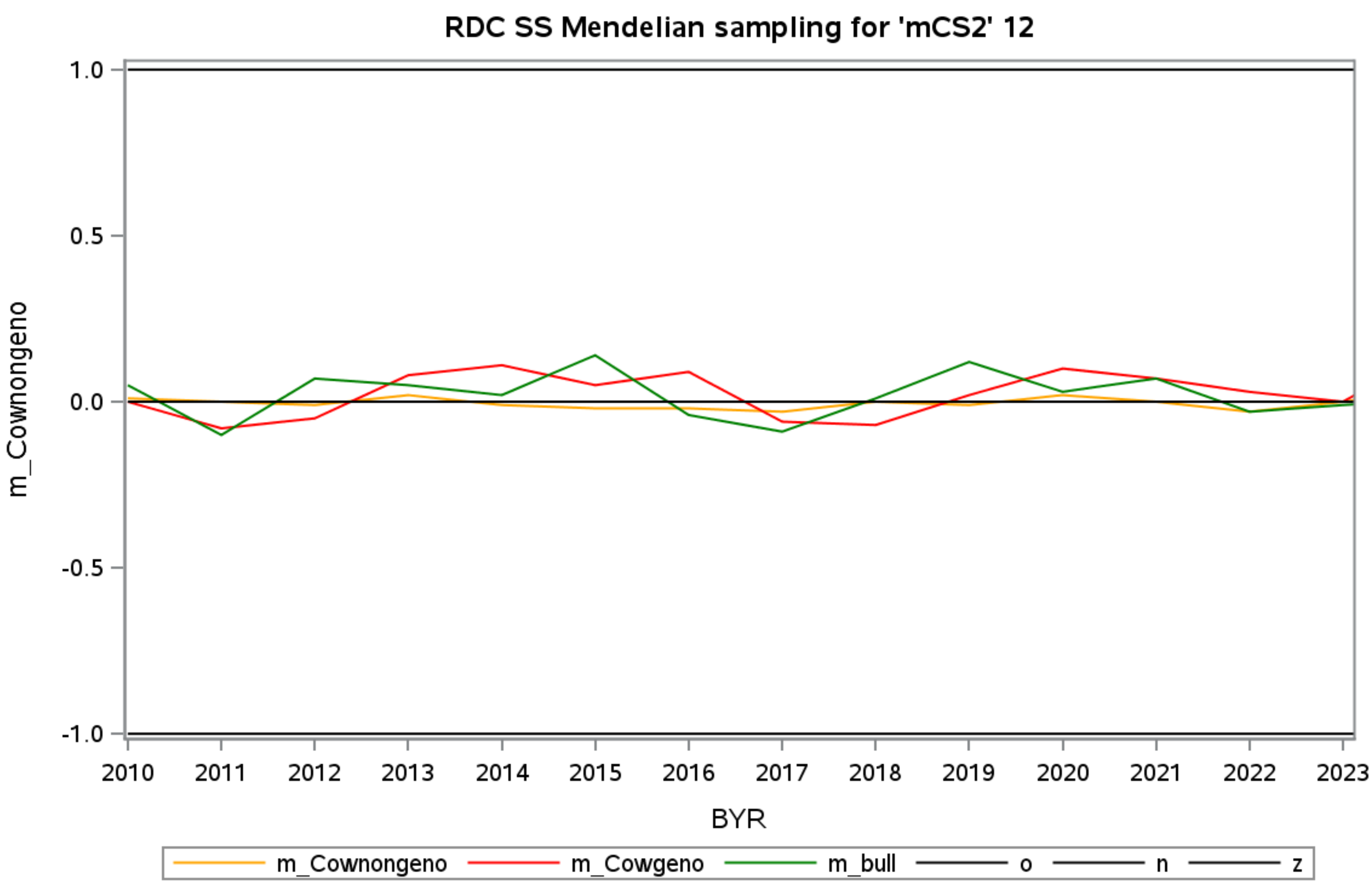
RDC SS Mendelian sampling for 'mCE2' 11

Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	0.02	-0.11	-0.12	76585	2302	696
2	2011	0.05	0.07	0.18	72324	4327	1130
3	2012	0.04	-0.08	0.09	65311	5074	1420
4	2013	0.01	0.08	0.04	62402	5619	1520
5	2014	0.00	0.00	0.04	57824	6290	1685
6	2015	0.03	0.17	0.09	51438	8306	1903
7	2016	0.04	0.06	0.34	43973	11236	1869
8	2017	0.04	0.18	0.10	36024	14397	2108
9	2018	0.04	0.14	0.20	30486	16542	2060
10	2019	0.05	0.25	0.04	26086	16991	1996
11	2020	0.02	0.24	0.21	22462	18776	2395
12	2021	-0.02	0.12	0.12	19565	19520	2364
13	2022	-0.01	0.10	0.00	16414	20660	2252
14	2023	0.03	0.12	0.02	14457	18544	1998
15	2024	0.04	0.07	0.06	3300	4211	590



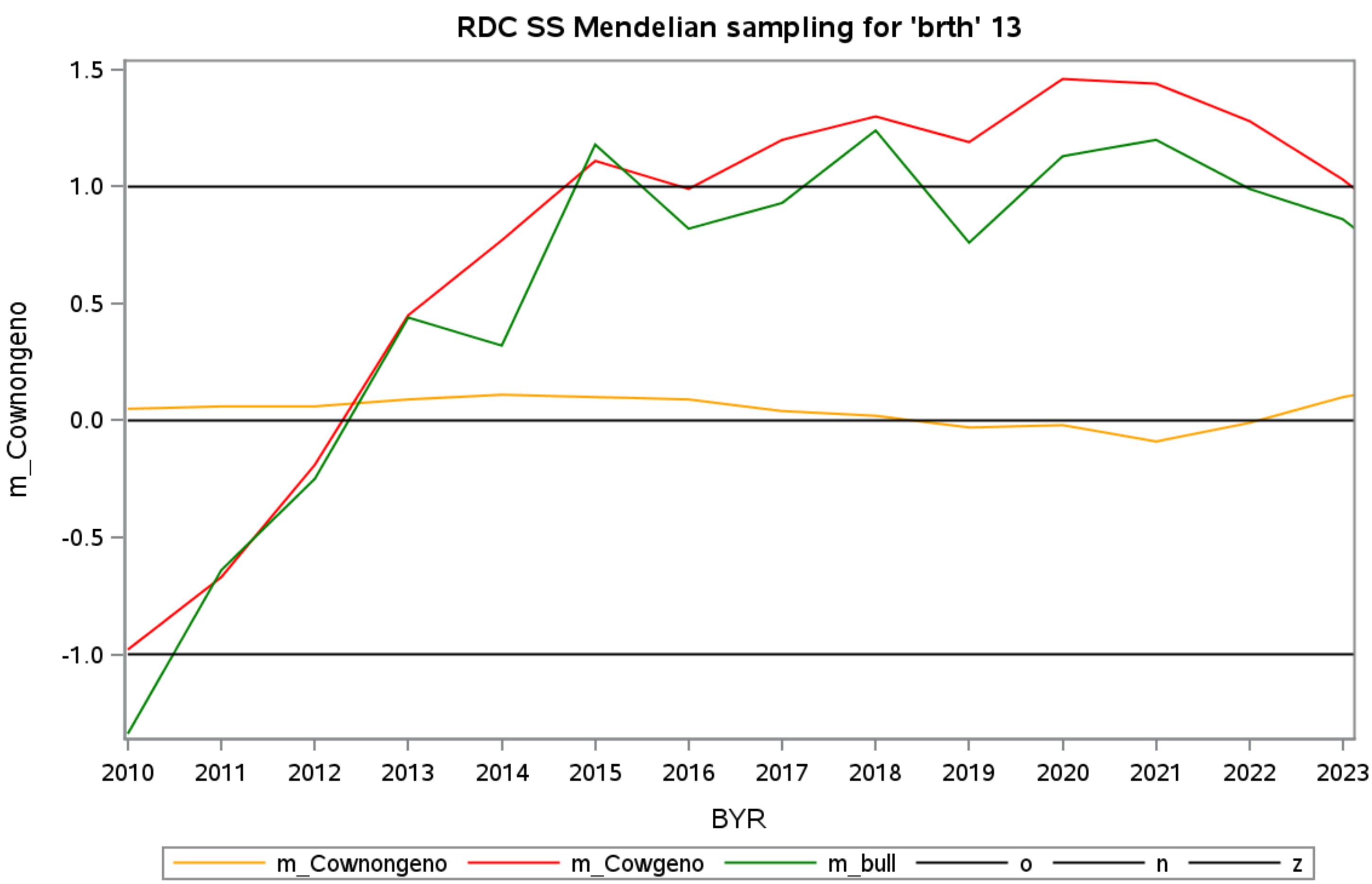
RDC SS Mendelian sampling for 'mCS2' 12

Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	0.01	0.00	0.05	76585	2302	696
2	2011	0.00	-0.08	-0.10	72324	4327	1130
3	2012	-0.01	-0.05	0.07	65311	5074	1420
4	2013	0.02	0.08	0.05	62402	5619	1520
5	2014	-0.01	0.11	0.02	57824	6290	1685
6	2015	-0.02	0.05	0.14	51438	8306	1903
7	2016	-0.02	0.09	-0.04	43973	11236	1869
8	2017	-0.03	-0.06	-0.09	36024	14397	2108
9	2018	0.00	-0.07	0.01	30486	16542	2060
10	2019	-0.01	0.02	0.12	26086	16991	1996
11	2020	0.02	0.10	0.03	22462	18776	2395
12	2021	0.00	0.07	0.07	19565	19520	2364
13	2022	-0.03	0.03	-0.03	16414	20660	2252
14	2023	0.00	0.00	-0.01	14457	18544	1998
15	2024	0.04	0.16	0.01	3300	4211	590

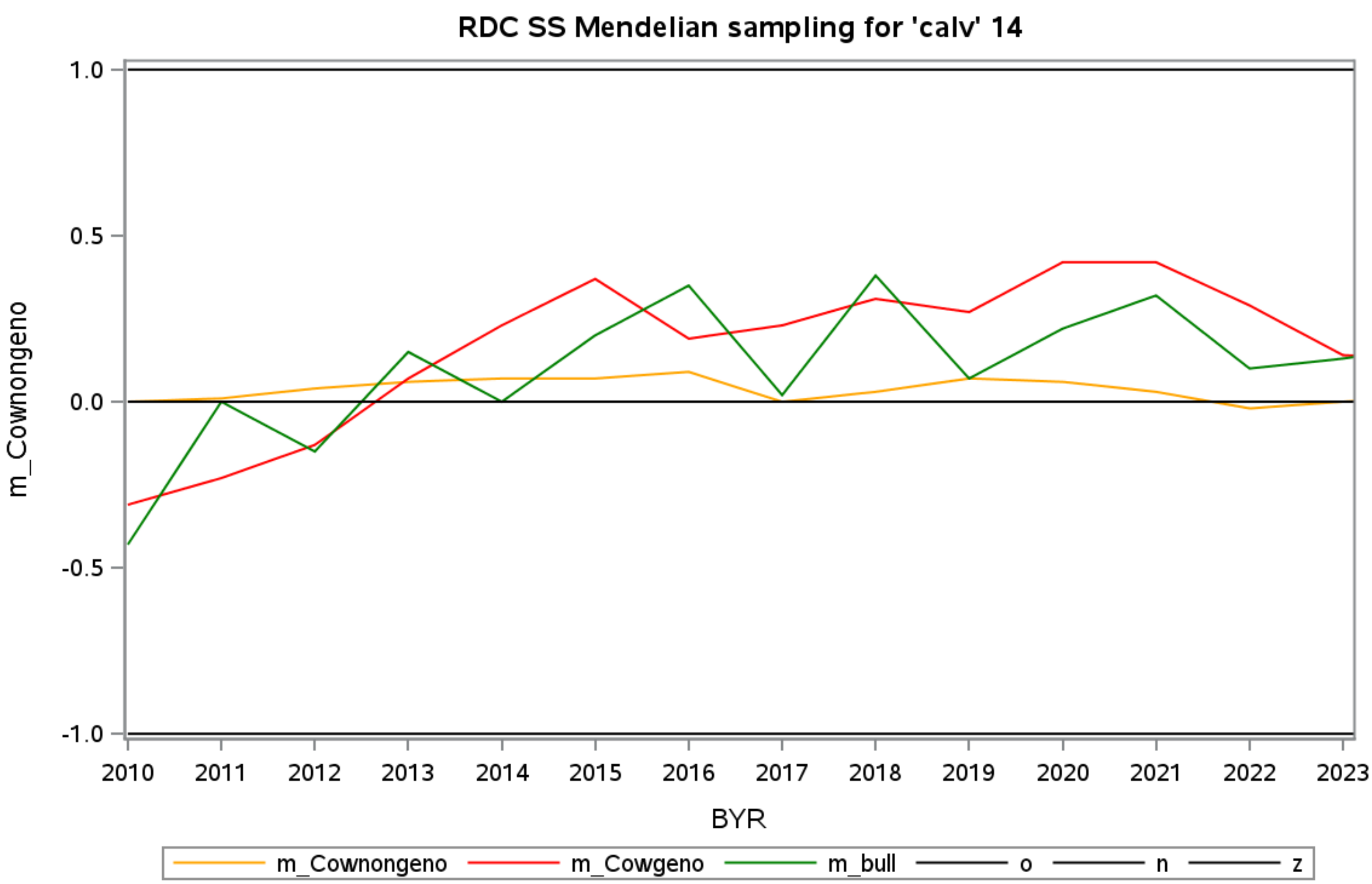


RDC SS Mendelian sampling for 'brth' 13

Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	0.05	-0.98	-1.34	76585	2302	696
2	2011	0.06	-0.67	-0.64	72324	4327	1130
3	2012	0.06	-0.19	-0.25	65311	5074	1420
4	2013	0.09	0.45	0.44	62402	5619	1520
5	2014	0.11	0.77	0.32	57824	6290	1685
6	2015	0.10	1.11	1.18	51438	8306	1903
7	2016	0.09	0.99	0.82	43973	11236	1869
8	2017	0.04	1.20	0.93	36024	14397	2108
9	2018	0.02	1.30	1.24	30486	16542	2060
10	2019	-0.03	1.19	0.76	26086	16991	1996
11	2020	-0.02	1.46	1.13	22462	18776	2395
12	2021	-0.09	1.44	1.20	19565	19520	2364
13	2022	-0.01	1.28	0.99	16414	20660	2252
14	2023	0.10	1.03	0.86	14457	18544	1998
15	2024	0.17	0.71	0.55	3300	4211	590

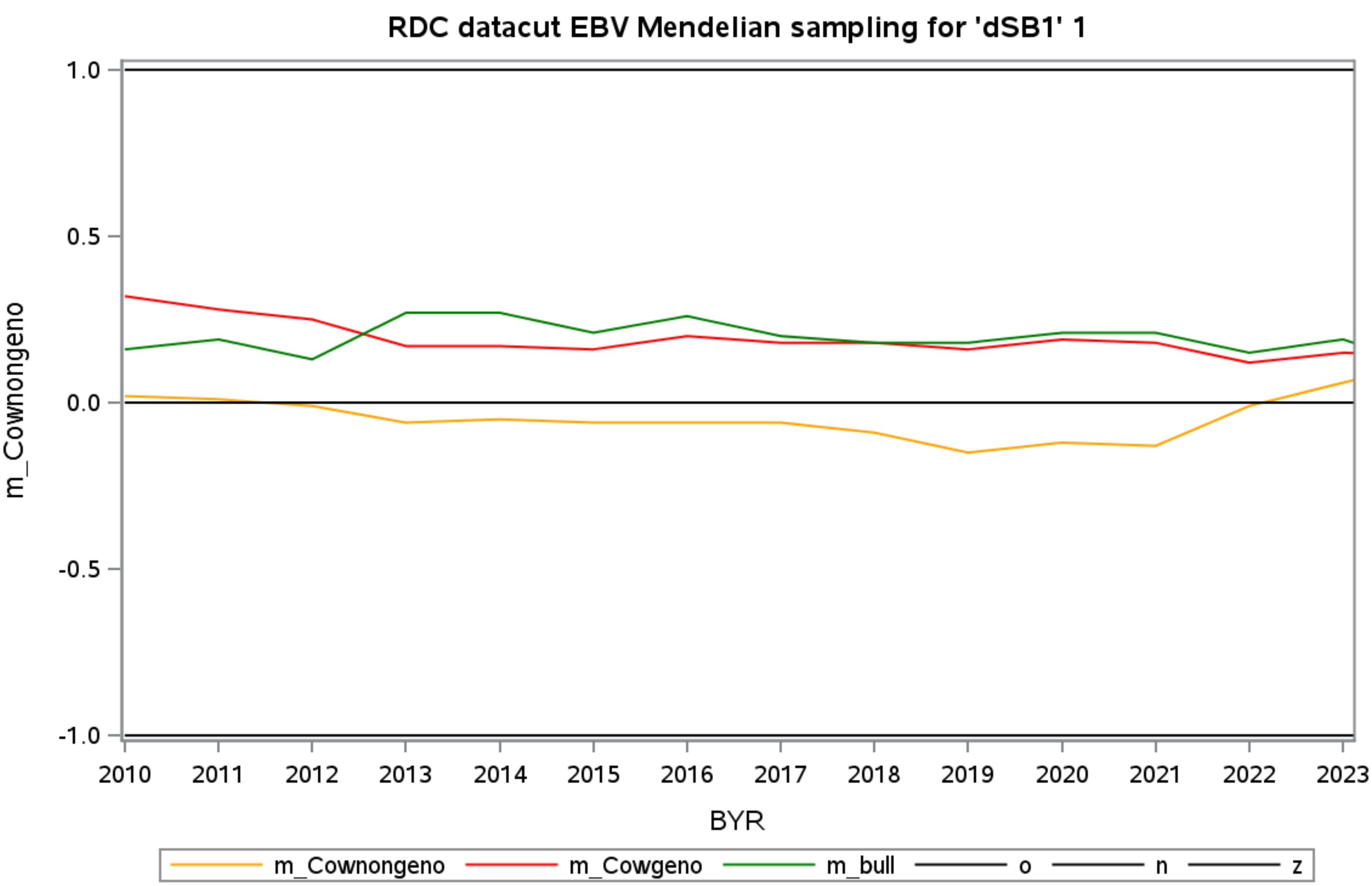


Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	0.00	-0.31	-0.43	76585	2302	696
2	2011	0.01	-0.23	0.00	72324	4327	1130
3	2012	0.04	-0.13	-0.15	65311	5074	1420
4	2013	0.06	0.07	0.15	62402	5619	1520
5	2014	0.07	0.23	0.00	57824	6290	1685
6	2015	0.07	0.37	0.20	51438	8306	1903
7	2016	0.09	0.19	0.35	43973	11236	1869
8	2017	0.00	0.23	0.02	36024	14397	2108
9	2018	0.03	0.31	0.38	30486	16542	2060
10	2019	0.07	0.27	0.07	26086	16991	1996
11	2020	0.06	0.42	0.22	22462	18776	2395
12	2021	0.03	0.42	0.32	19565	19520	2364
13	2022	-0.02	0.29	0.10	16414	20660	2252
14	2023	0.00	0.14	0.13	14457	18544	1998
15	2024	0.02	0.13	0.17	3300	4211	590

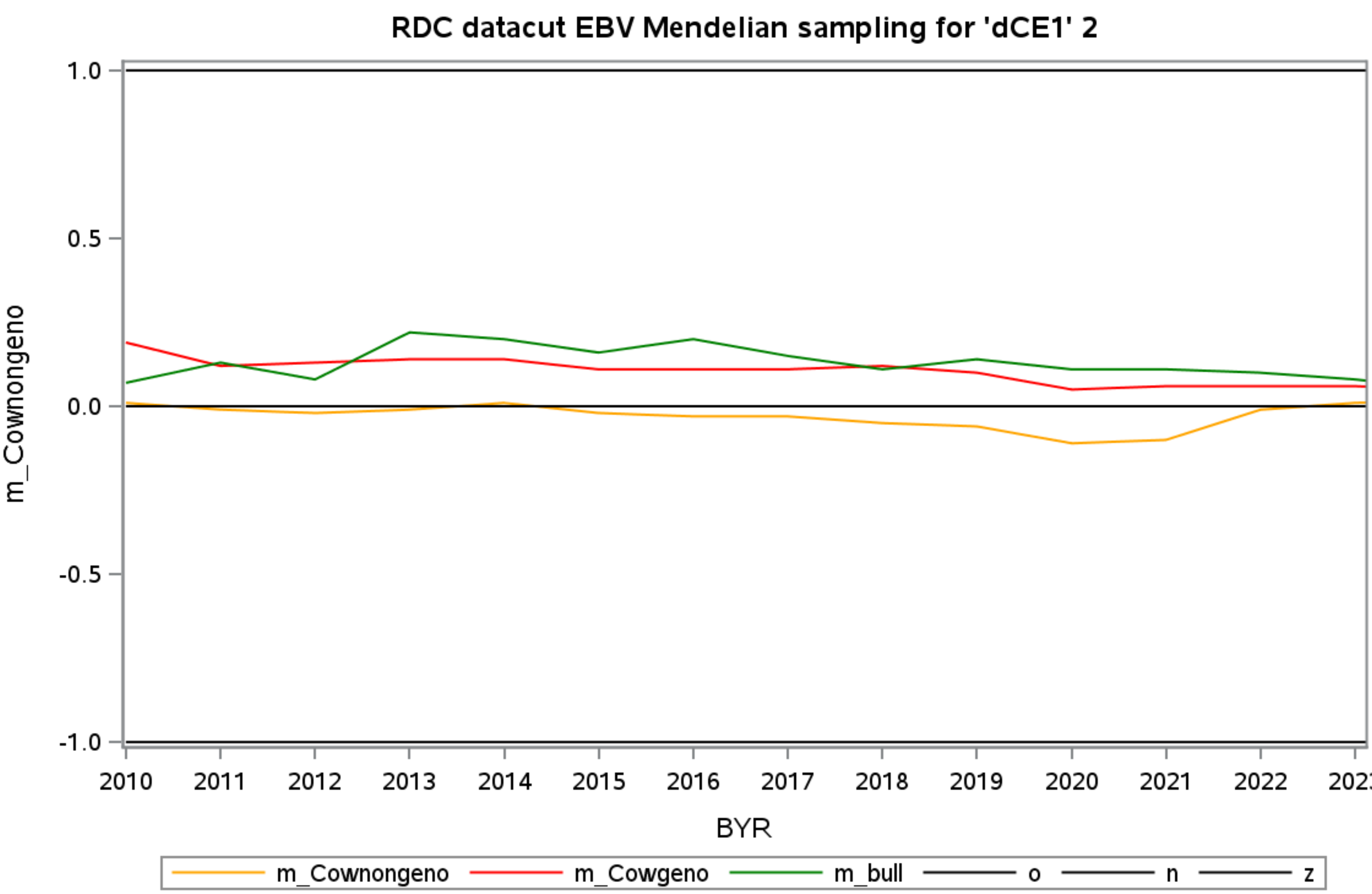


RDC datacut EBV Mendelian sampling for 'dSB1' 1

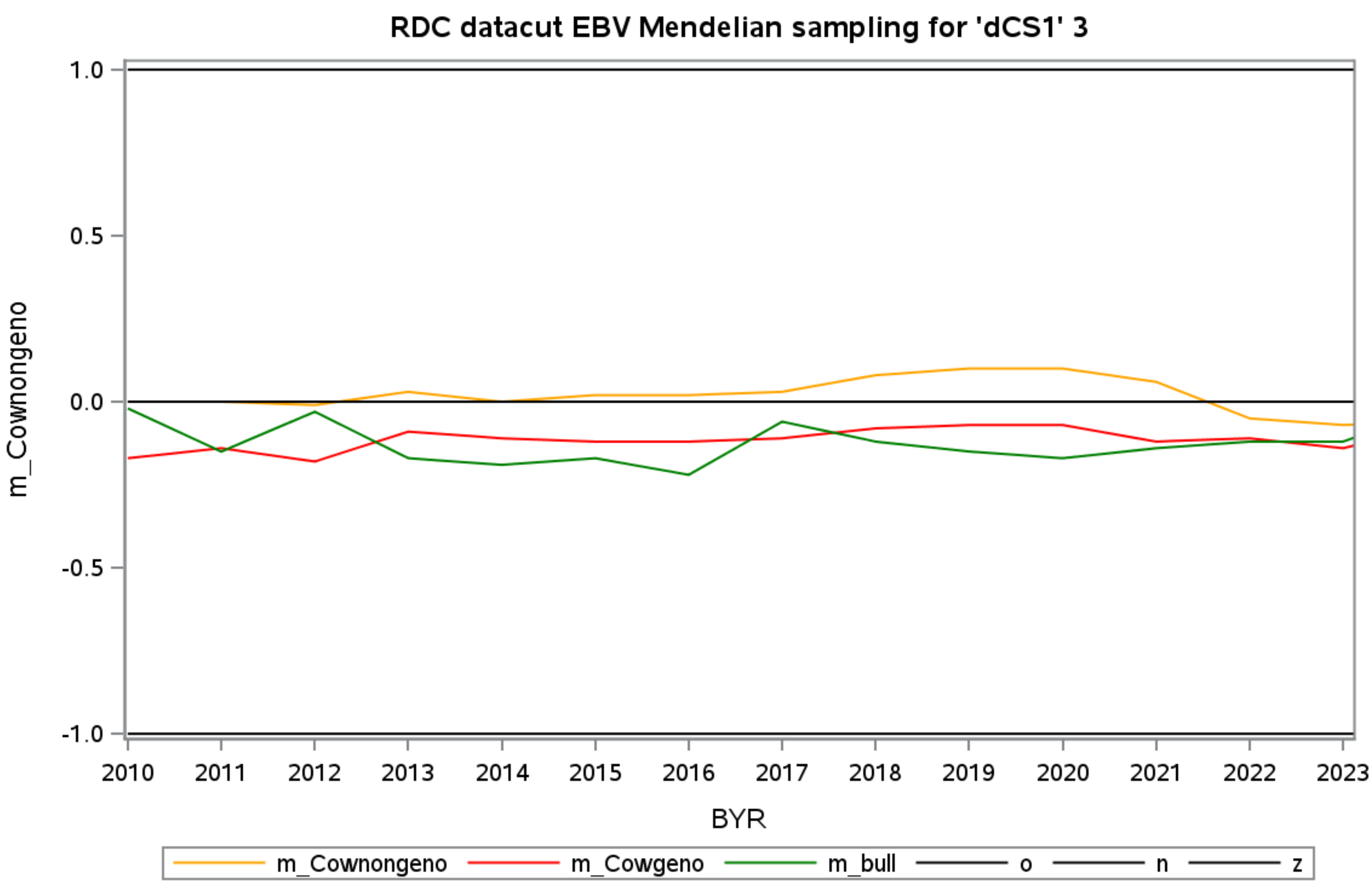
Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	0.02	0.32	0.16	76585	2302	696
2	2011	0.01	0.28	0.19	72324	4327	1130
3	2012	-0.01	0.25	0.13	65311	5074	1420
4	2013	-0.06	0.17	0.27	62402	5619	1520
5	2014	-0.05	0.17	0.27	57824	6290	1685
6	2015	-0.06	0.16	0.21	51438	8306	1903
7	2016	-0.06	0.20	0.26	43973	11236	1869
8	2017	-0.06	0.18	0.20	36024	14397	2108
9	2018	-0.09	0.18	0.18	30486	16542	2060
10	2019	-0.15	0.16	0.18	26086	16991	1996
11	2020	-0.12	0.19	0.21	22462	18776	2395
12	2021	-0.13	0.18	0.21	19565	19520	2364
13	2022	-0.01	0.12	0.15	16414	20660	2252
14	2023	0.06	0.15	0.19	14457	18544	1998
15	2024	0.13	0.14	0.10	3300	4211	590



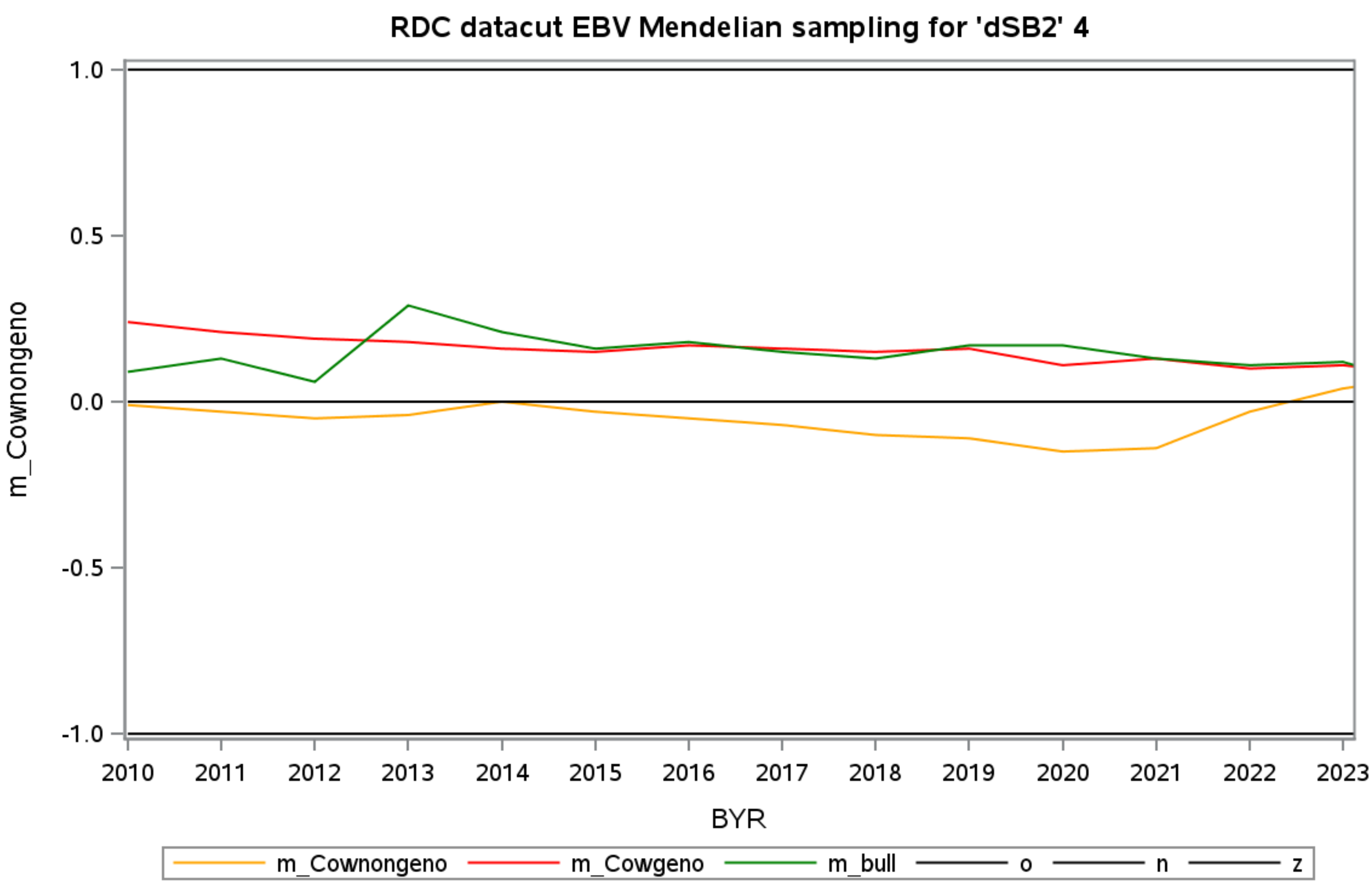
Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	0.01	0.19	0.07	76585	2302	696
2	2011	-0.01	0.12	0.13	72324	4327	1130
3	2012	-0.02	0.13	0.08	65311	5074	1420
4	2013	-0.01	0.14	0.22	62402	5619	1520
5	2014	0.01	0.14	0.20	57824	6290	1685
6	2015	-0.02	0.11	0.16	51438	8306	1903
7	2016	-0.03	0.11	0.20	43973	11236	1869
8	2017	-0.03	0.11	0.15	36024	14397	2108
9	2018	-0.05	0.12	0.11	30486	16542	2060
10	2019	-0.06	0.10	0.14	26086	16991	1996
11	2020	-0.11	0.05	0.11	22462	18776	2395
12	2021	-0.10	0.06	0.11	19565	19520	2364
13	2022	-0.01	0.06	0.10	16414	20660	2252
14	2023	0.01	0.06	0.08	14457	18544	1998
15	2024	0.02	0.05	0.05	3300	4211	590



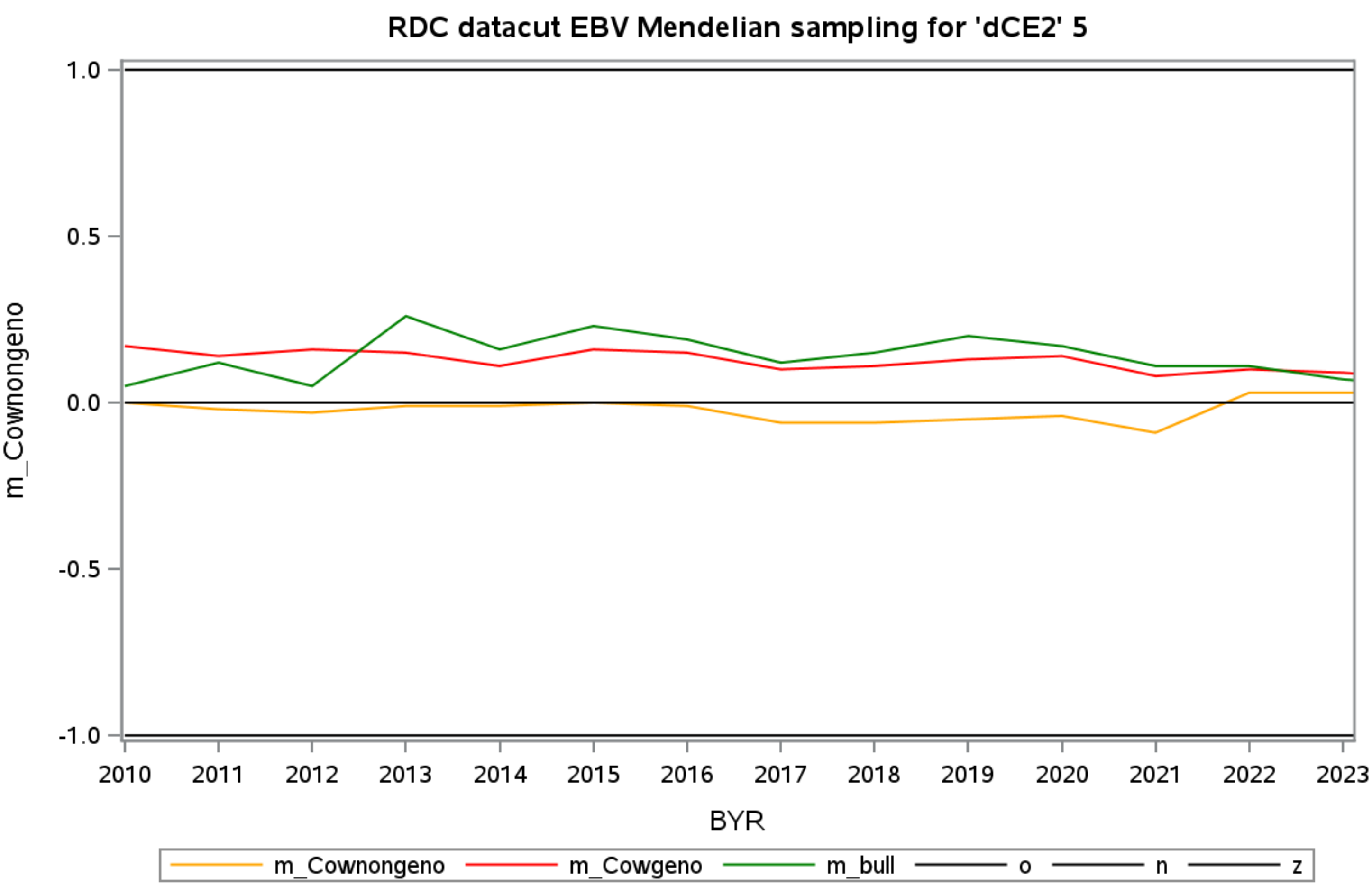
Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	0.00	-0.17	-0.02	76585	2302	696
2	2011	0.00	-0.14	-0.15	72324	4327	1130
3	2012	-0.01	-0.18	-0.03	65311	5074	1420
4	2013	0.03	-0.09	-0.17	62402	5619	1520
5	2014	0.00	-0.11	-0.19	57824	6290	1685
6	2015	0.02	-0.12	-0.17	51438	8306	1903
7	2016	0.02	-0.12	-0.22	43973	11236	1869
8	2017	0.03	-0.11	-0.06	36024	14397	2108
9	2018	0.08	-0.08	-0.12	30486	16542	2060
10	2019	0.10	-0.07	-0.15	26086	16991	1996
11	2020	0.10	-0.07	-0.17	22462	18776	2395
12	2021	0.06	-0.12	-0.14	19565	19520	2364
13	2022	-0.05	-0.11	-0.12	16414	20660	2252
14	2023	-0.07	-0.14	-0.12	14457	18544	1998
15	2024	-0.06	-0.07	-0.02	3300	4211	590



Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	-0.01	0.24	0.09	76585	2302	696
2	2011	-0.03	0.21	0.13	72324	4327	1130
3	2012	-0.05	0.19	0.06	65311	5074	1420
4	2013	-0.04	0.18	0.29	62402	5619	1520
5	2014	0.00	0.16	0.21	57824	6290	1685
6	2015	-0.03	0.15	0.16	51438	8306	1903
7	2016	-0.05	0.17	0.18	43973	11236	1869
8	2017	-0.07	0.16	0.15	36024	14397	2108
9	2018	-0.10	0.15	0.13	30486	16542	2060
10	2019	-0.11	0.16	0.17	26086	16991	1996
11	2020	-0.15	0.11	0.17	22462	18776	2395
12	2021	-0.14	0.13	0.13	19565	19520	2364
13	2022	-0.03	0.10	0.11	16414	20660	2252
14	2023	0.04	0.11	0.12	14457	18544	1998
15	2024	0.08	0.08	0.04	3300	4211	590

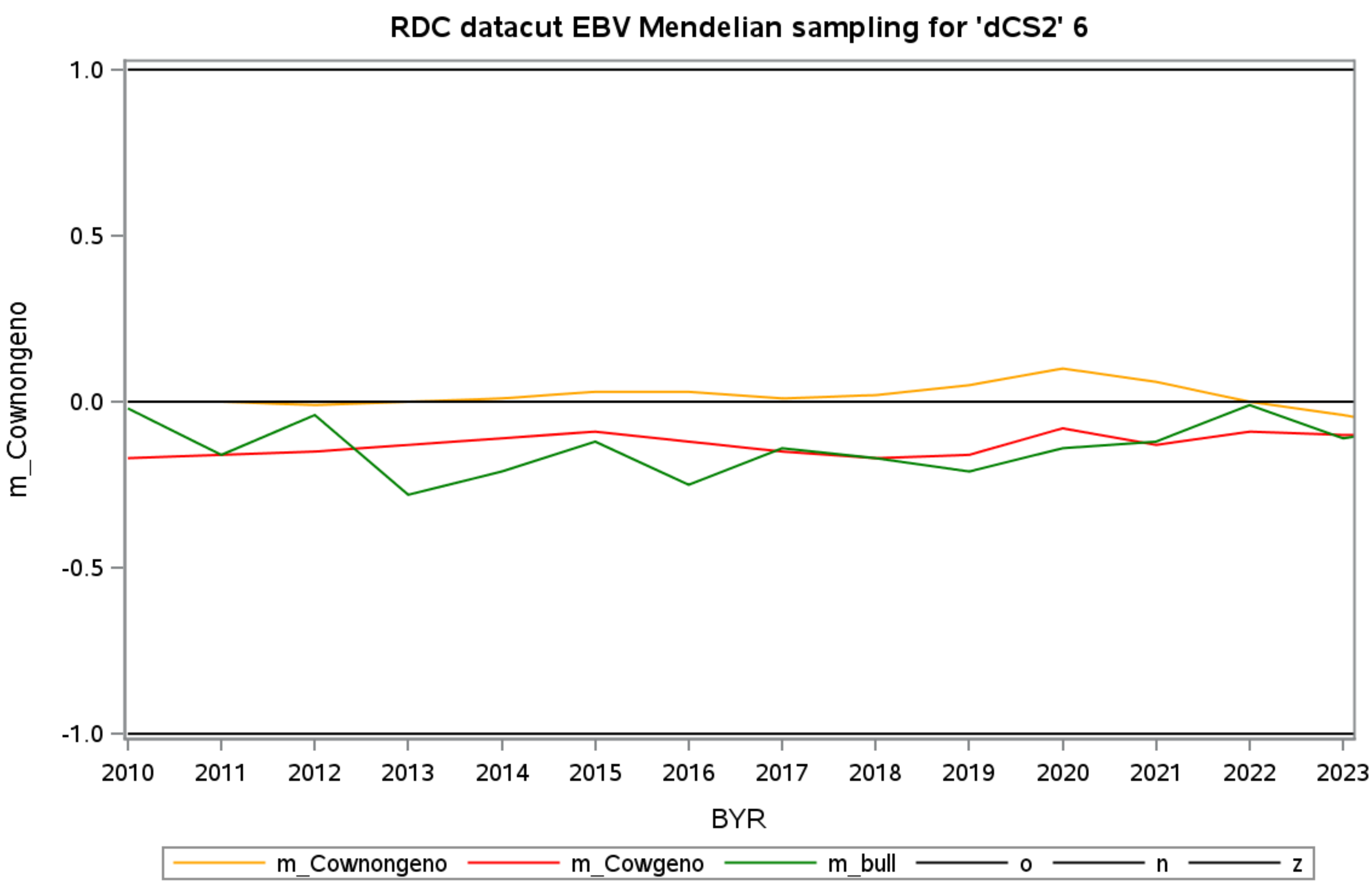


Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	0.00	0.17	0.05	76585	2302	696
2	2011	-0.02	0.14	0.12	72324	4327	1130
3	2012	-0.03	0.16	0.05	65311	5074	1420
4	2013	-0.01	0.15	0.26	62402	5619	1520
5	2014	-0.01	0.11	0.16	57824	6290	1685
6	2015	0.00	0.16	0.23	51438	8306	1903
7	2016	-0.01	0.15	0.19	43973	11236	1869
8	2017	-0.06	0.10	0.12	36024	14397	2108
9	2018	-0.06	0.11	0.15	30486	16542	2060
10	2019	-0.05	0.13	0.20	26086	16991	1996
11	2020	-0.04	0.14	0.17	22462	18776	2395
12	2021	-0.09	0.08	0.11	19565	19520	2364
13	2022	0.03	0.10	0.11	16414	20660	2252
14	2023	0.03	0.09	0.07	14457	18544	1998
15	2024	0.03	0.07	0.05	3300	4211	590

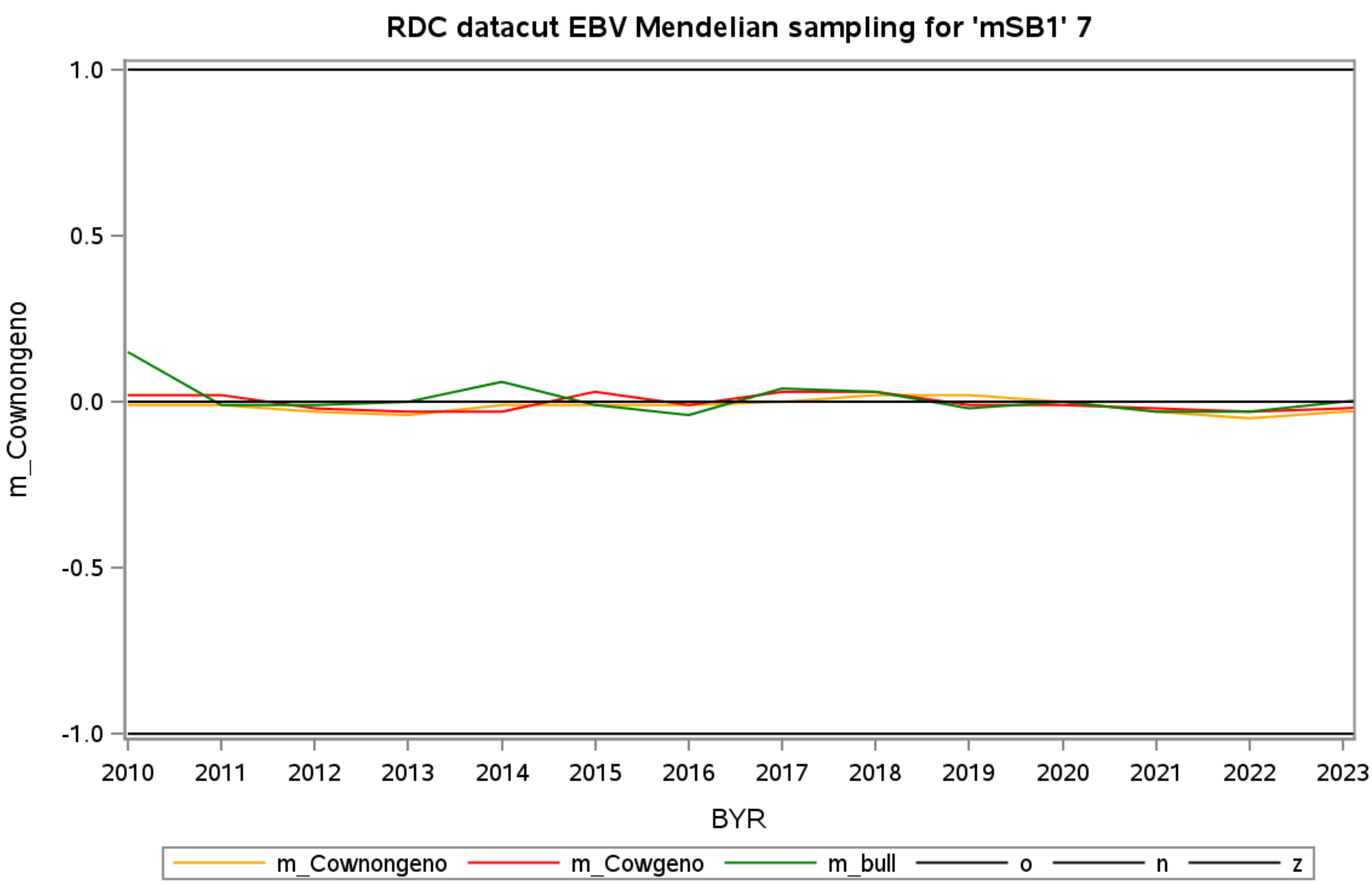


RDC datacut EBV Mendelian sampling for 'dCS2' 6

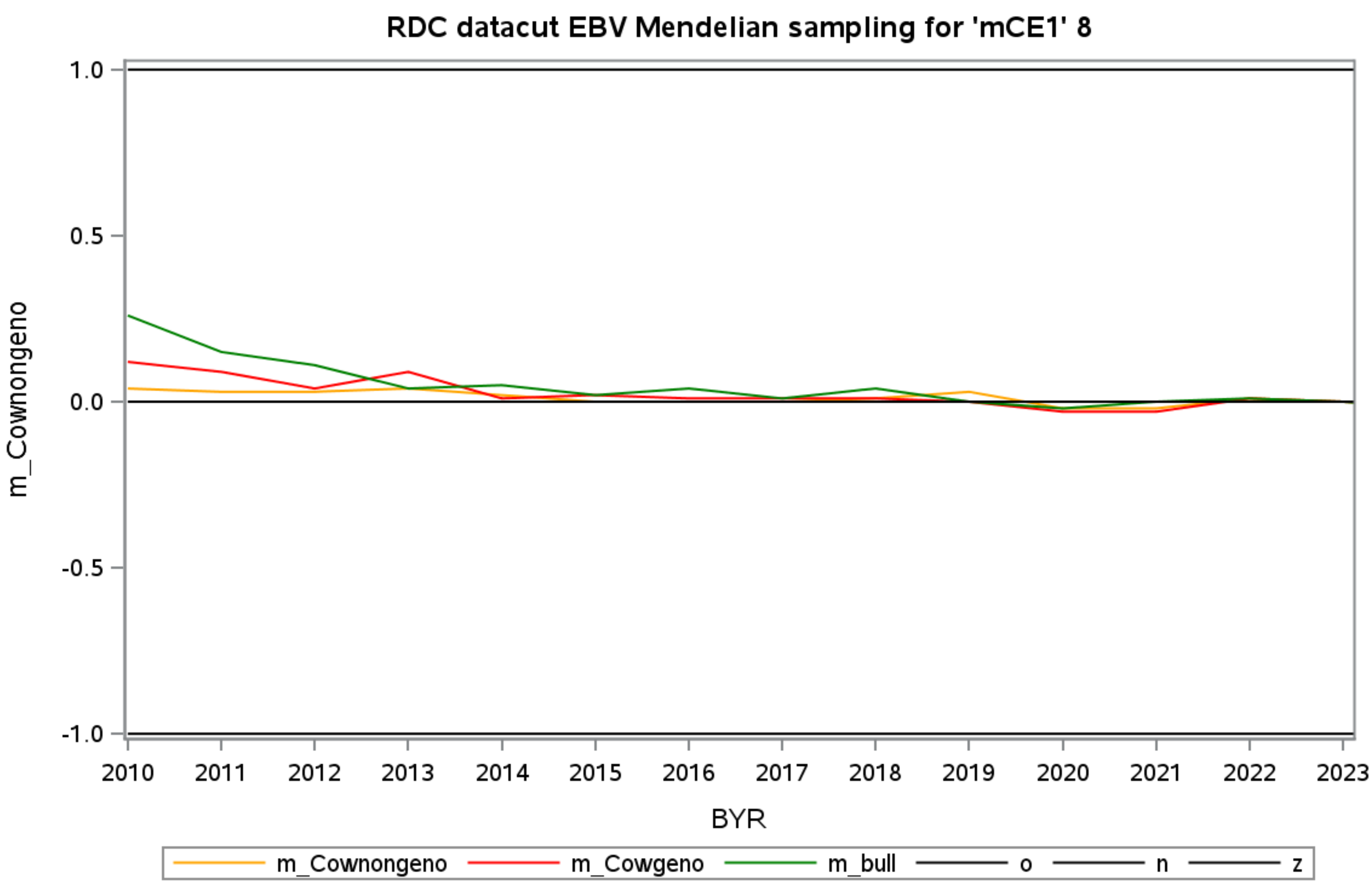
Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	0.00	-0.17	-0.02	76585	2302	696
2	2011	0.00	-0.16	-0.16	72324	4327	1130
3	2012	-0.01	-0.15	-0.04	65311	5074	1420
4	2013	0.00	-0.13	-0.28	62402	5619	1520
5	2014	0.01	-0.11	-0.21	57824	6290	1685
6	2015	0.03	-0.09	-0.12	51438	8306	1903
7	2016	0.03	-0.12	-0.25	43973	11236	1869
8	2017	0.01	-0.15	-0.14	36024	14397	2108
9	2018	0.02	-0.17	-0.17	30486	16542	2060
10	2019	0.05	-0.16	-0.21	26086	16991	1996
11	2020	0.10	-0.08	-0.14	22462	18776	2395
12	2021	0.06	-0.13	-0.12	19565	19520	2364
13	2022	0.00	-0.09	-0.01	16414	20660	2252
14	2023	-0.04	-0.10	-0.11	14457	18544	1998
15	2024	-0.09	-0.10	-0.07	3300	4211	590



Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	-0.01	0.02	0.15	76585	2302	696
2	2011	-0.01	0.02	-0.01	72324	4327	1130
3	2012	-0.03	-0.02	-0.01	65311	5074	1420
4	2013	-0.04	-0.03	0.00	62402	5619	1520
5	2014	-0.01	-0.03	0.06	57824	6290	1685
6	2015	-0.01	0.03	-0.01	51438	8306	1903
7	2016	-0.01	-0.01	-0.04	43973	11236	1869
8	2017	0.00	0.03	0.04	36024	14397	2108
9	2018	0.02	0.03	0.03	30486	16542	2060
10	2019	0.02	-0.01	-0.02	26086	16991	1996
11	2020	0.00	-0.01	0.00	22462	18776	2395
12	2021	-0.03	-0.02	-0.03	19565	19520	2364
13	2022	-0.05	-0.03	-0.03	16414	20660	2252
14	2023	-0.03	-0.02	0.00	14457	18544	1998
15	2024	-0.02	0.00	0.03	3300	4211	590

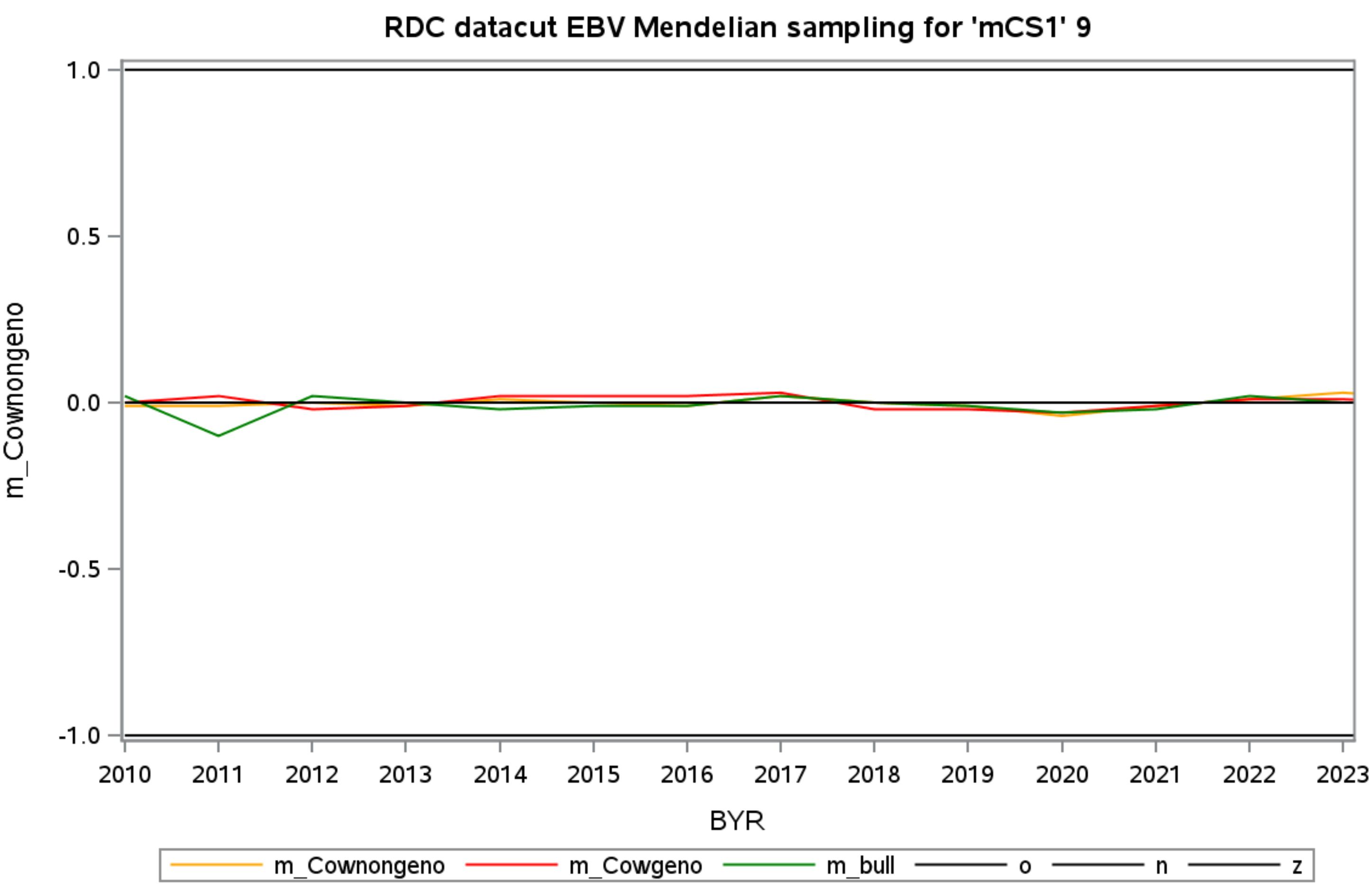


Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	0.04	0.12	0.26	76585	2302	696
2	2011	0.03	0.09	0.15	72324	4327	1130
3	2012	0.03	0.04	0.11	65311	5074	1420
4	2013	0.04	0.09	0.04	62402	5619	1520
5	2014	0.02	0.01	0.05	57824	6290	1685
6	2015	0.00	0.02	0.02	51438	8306	1903
7	2016	0.00	0.01	0.04	43973	11236	1869
8	2017	0.00	0.01	0.01	36024	14397	2108
9	2018	0.01	0.01	0.04	30486	16542	2060
10	2019	0.03	0.00	0.00	26086	16991	1996
11	2020	-0.02	-0.03	-0.02	22462	18776	2395
12	2021	-0.02	-0.03	0.00	19565	19520	2364
13	2022	0.01	0.01	0.01	16414	20660	2252
14	2023	0.00	0.00	0.00	14457	18544	1998
15	2024	-0.01	-0.01	-0.02	3300	4211	590



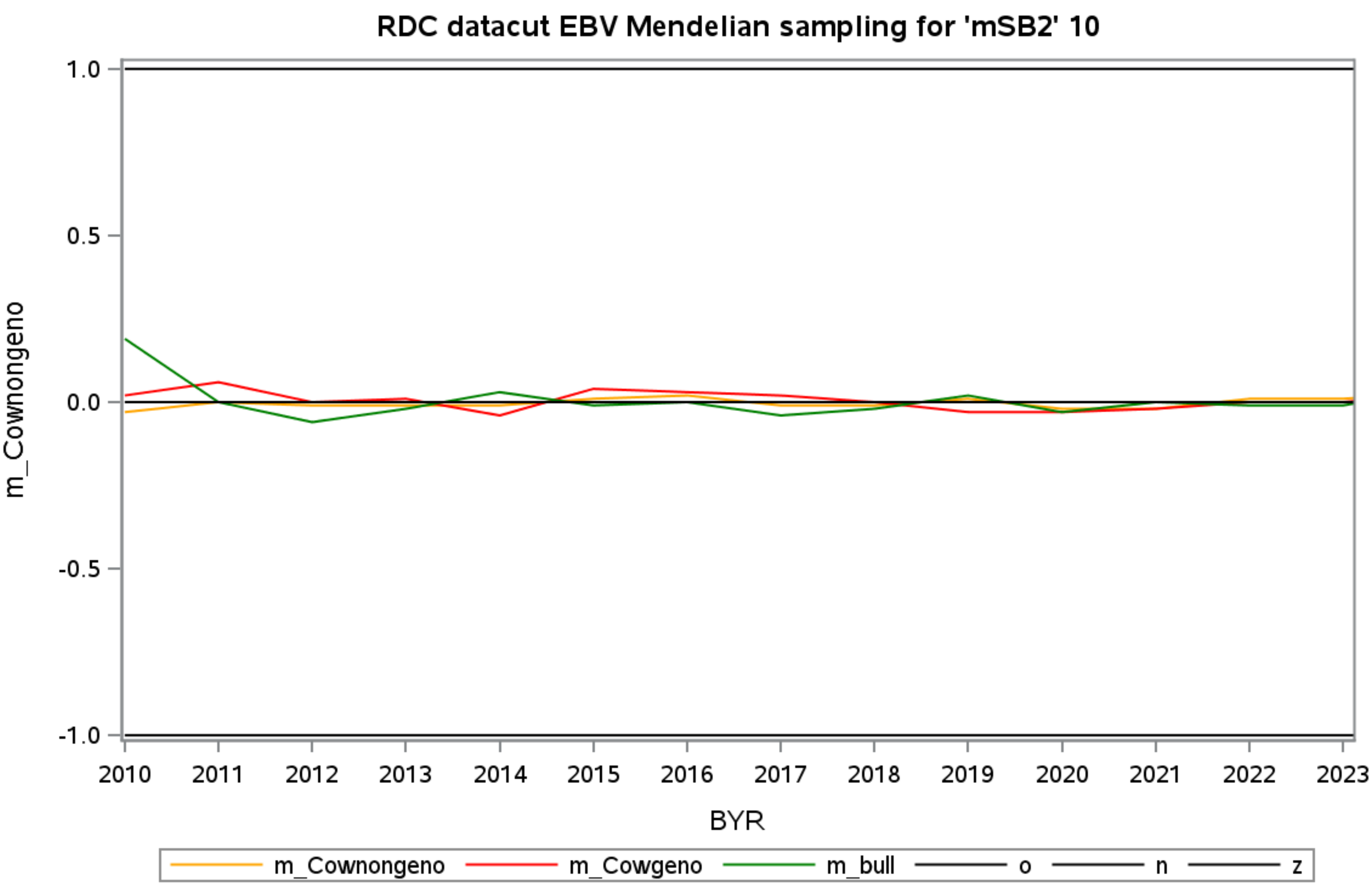
RDC datacut EBV Mendelian sampling for 'mCS1' 9

Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	-0.01	0.00	0.02	76585	2302	696
2	2011	-0.01	0.02	-0.10	72324	4327	1130
3	2012	0.00	-0.02	0.02	65311	5074	1420
4	2013	-0.01	-0.01	0.00	62402	5619	1520
5	2014	0.01	0.02	-0.02	57824	6290	1685
6	2015	0.00	0.02	-0.01	51438	8306	1903
7	2016	-0.01	0.02	-0.01	43973	11236	1869
8	2017	0.02	0.03	0.02	36024	14397	2108
9	2018	0.00	-0.02	0.00	30486	16542	2060
10	2019	-0.01	-0.02	-0.01	26086	16991	1996
11	2020	-0.04	-0.03	-0.03	22462	18776	2395
12	2021	-0.01	-0.01	-0.02	19565	19520	2364
13	2022	0.01	0.01	0.02	16414	20660	2252
14	2023	0.03	0.01	0.00	14457	18544	1998
15	2024	0.01	0.00	0.00	3300	4211	590



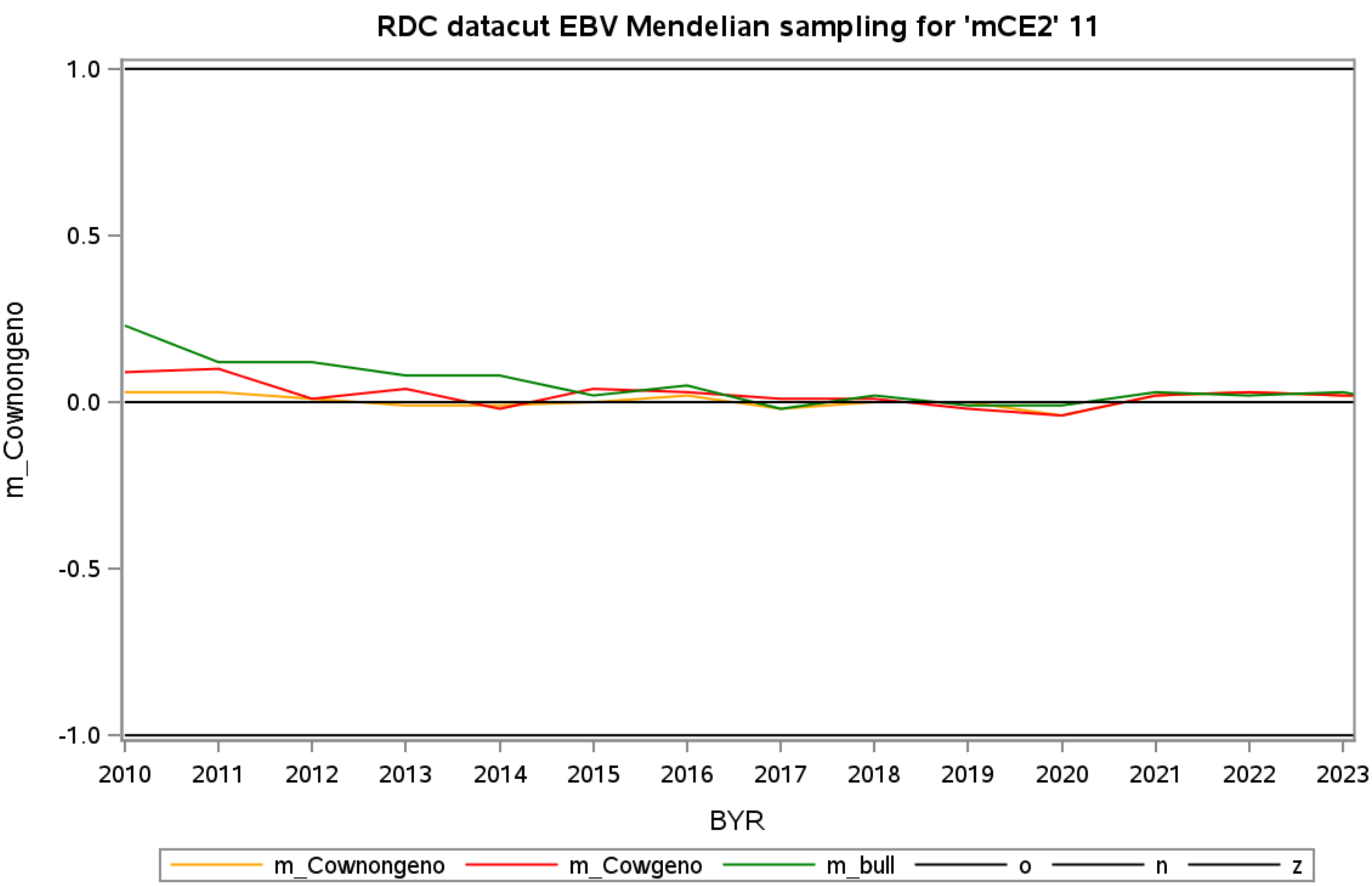
RDC datacut EBV Mendelian sampling for 'mSB2' 10

Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	-0.03	0.02	0.19	76585	2302	696
2	2011	0.00	0.06	0.00	72324	4327	1130
3	2012	-0.01	0.00	-0.06	65311	5074	1420
4	2013	-0.01	0.01	-0.02	62402	5619	1520
5	2014	-0.01	-0.04	0.03	57824	6290	1685
6	2015	0.01	0.04	-0.01	51438	8306	1903
7	2016	0.02	0.03	0.00	43973	11236	1869
8	2017	-0.01	0.02	-0.04	36024	14397	2108
9	2018	-0.01	0.00	-0.02	30486	16542	2060
10	2019	0.01	-0.03	0.02	26086	16991	1996
11	2020	-0.02	-0.03	-0.03	22462	18776	2395
12	2021	-0.02	-0.02	0.00	19565	19520	2364
13	2022	0.01	0.00	-0.01	16414	20660	2252
14	2023	0.01	0.00	-0.01	14457	18544	1998
15	2024	0.03	0.03	0.04	3300	4211	590



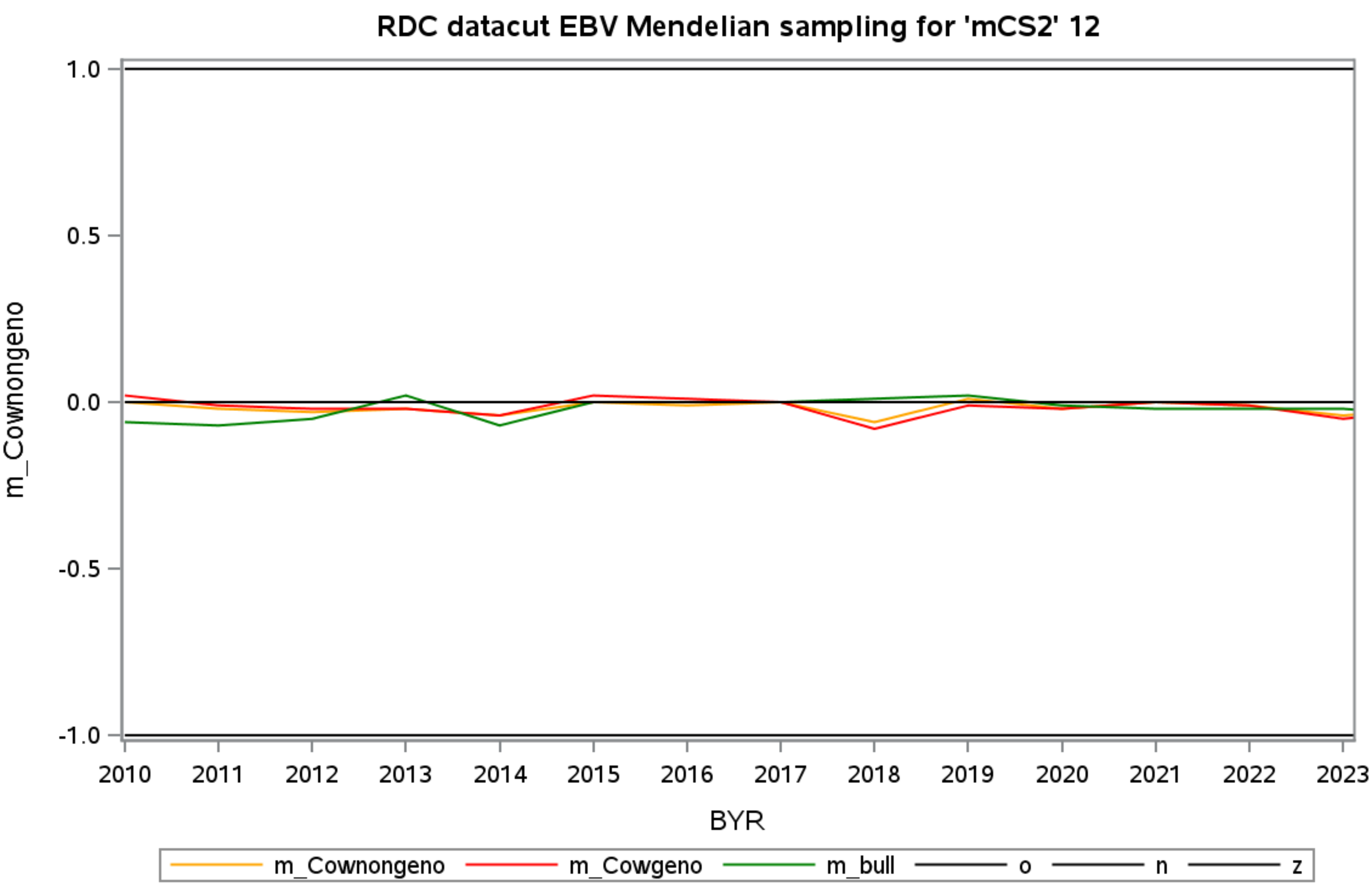
RDC datacut EBV Mendelian sampling for 'mCE2' 11

Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	0.03	0.09	0.23	76585	2302	696
2	2011	0.03	0.10	0.12	72324	4327	1130
3	2012	0.01	0.01	0.12	65311	5074	1420
4	2013	-0.01	0.04	0.08	62402	5619	1520
5	2014	-0.01	-0.02	0.08	57824	6290	1685
6	2015	0.00	0.04	0.02	51438	8306	1903
7	2016	0.02	0.03	0.05	43973	11236	1869
8	2017	-0.02	0.01	-0.02	36024	14397	2108
9	2018	0.00	0.01	0.02	30486	16542	2060
10	2019	0.00	-0.02	-0.01	26086	16991	1996
11	2020	-0.04	-0.04	-0.01	22462	18776	2395
12	2021	0.02	0.02	0.03	19565	19520	2364
13	2022	0.03	0.03	0.02	16414	20660	2252
14	2023	0.02	0.02	0.03	14457	18544	1998
15	2024	0.02	0.02	-0.02	3300	4211	590

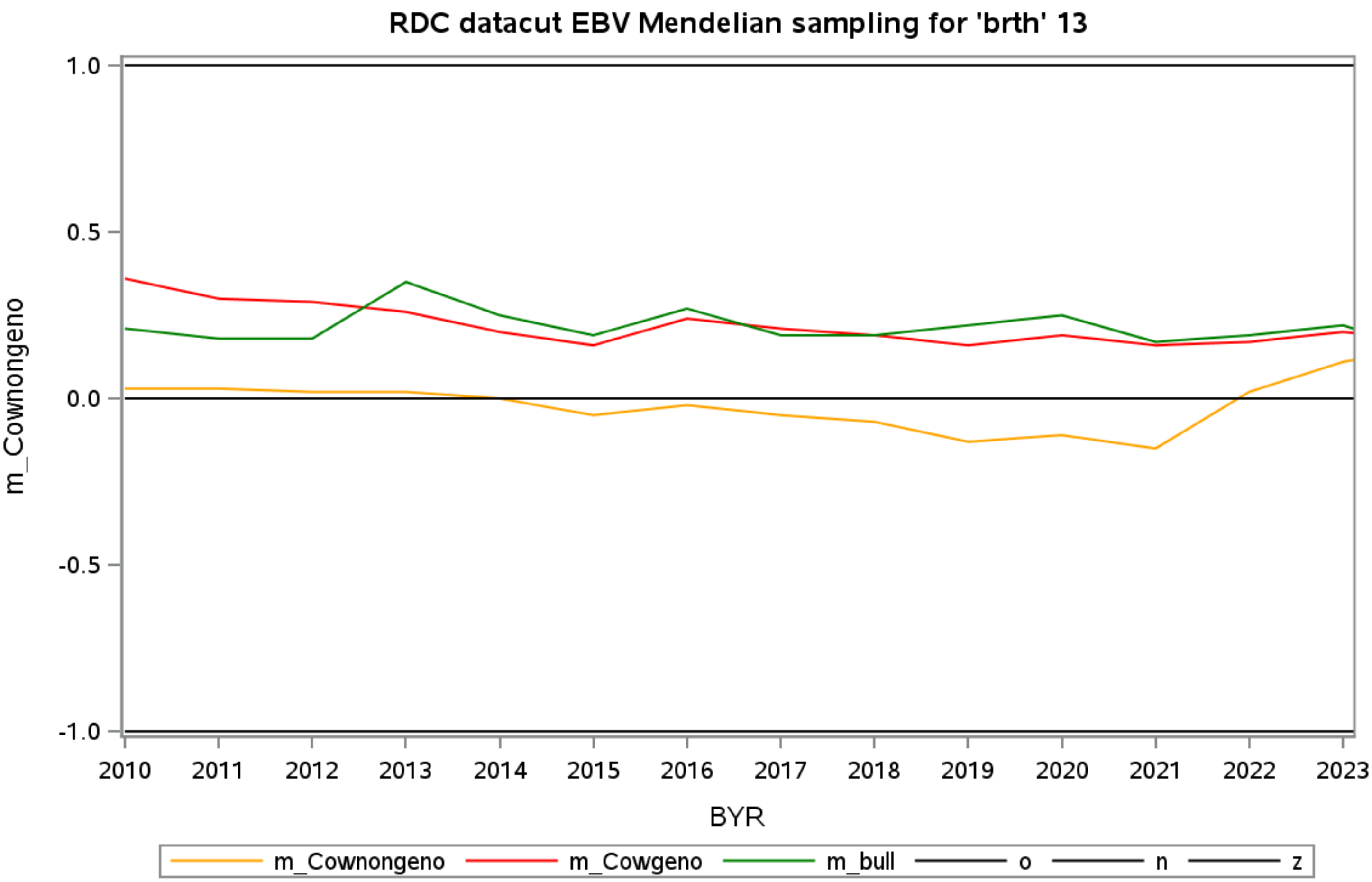


RDC datacut EBV Mendelian sampling for 'mCS2' 12

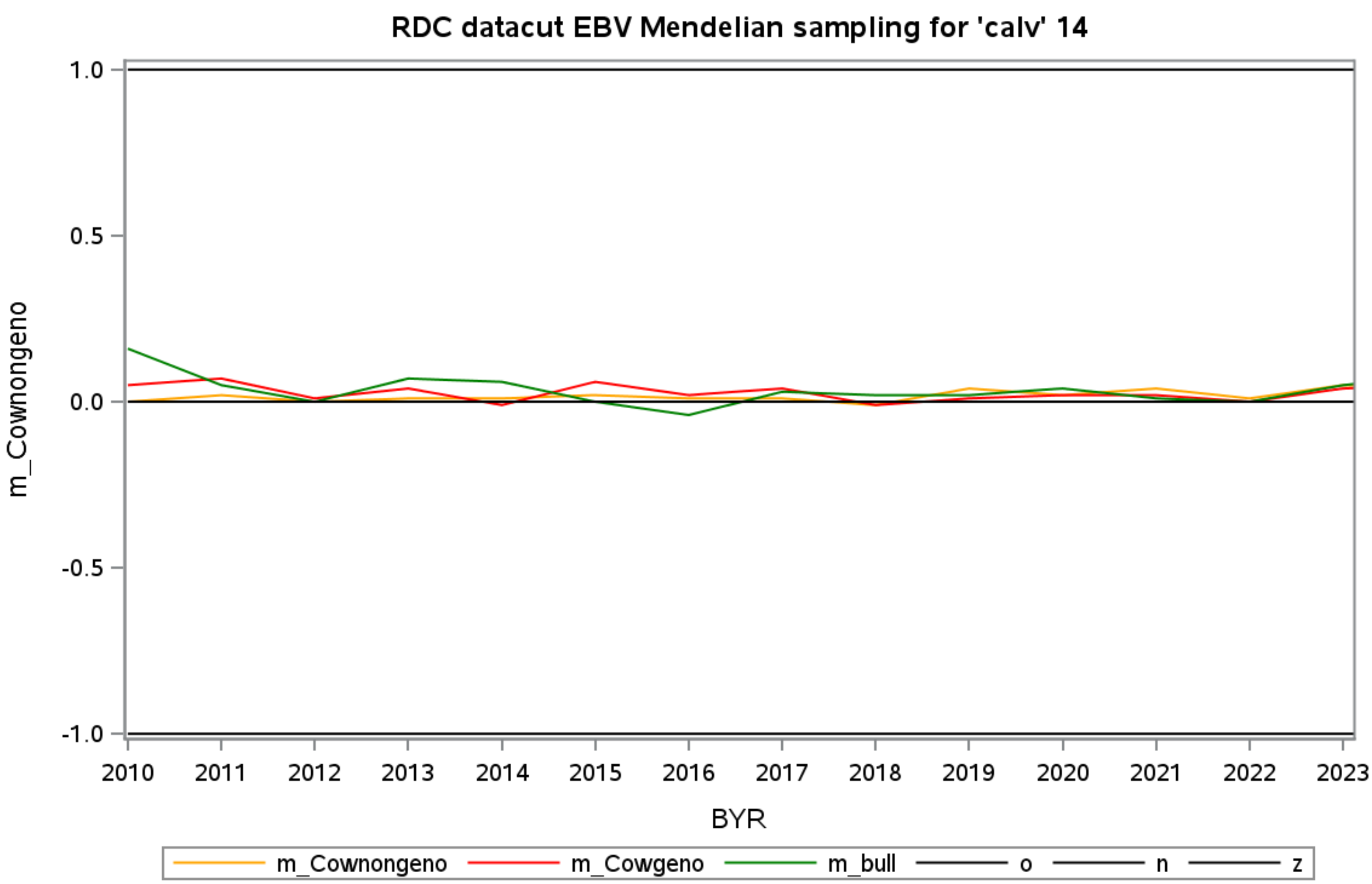
Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	0.00	0.02	-0.06	76585	2302	696
2	2011	-0.02	-0.01	-0.07	72324	4327	1130
3	2012	-0.03	-0.02	-0.05	65311	5074	1420
4	2013	-0.02	-0.02	0.02	62402	5619	1520
5	2014	-0.04	-0.04	-0.07	57824	6290	1685
6	2015	0.00	0.02	0.00	51438	8306	1903
7	2016	-0.01	0.01	0.00	43973	11236	1869
8	2017	0.00	0.00	0.00	36024	14397	2108
9	2018	-0.06	-0.08	0.01	30486	16542	2060
10	2019	0.01	-0.01	0.02	26086	16991	1996
11	2020	-0.02	-0.02	-0.01	22462	18776	2395
12	2021	0.00	0.00	-0.02	19565	19520	2364
13	2022	-0.01	-0.01	-0.02	16414	20660	2252
14	2023	-0.04	-0.05	-0.02	14457	18544	1998
15	2024	-0.02	-0.02	-0.04	3300	4211	590



Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	0.03	0.36	0.21	76585	2302	696
2	2011	0.03	0.30	0.18	72324	4327	1130
3	2012	0.02	0.29	0.18	65311	5074	1420
4	2013	0.02	0.26	0.35	62402	5619	1520
5	2014	0.00	0.20	0.25	57824	6290	1685
6	2015	-0.05	0.16	0.19	51438	8306	1903
7	2016	-0.02	0.24	0.27	43973	11236	1869
8	2017	-0.05	0.21	0.19	36024	14397	2108
9	2018	-0.07	0.19	0.19	30486	16542	2060
10	2019	-0.13	0.16	0.22	26086	16991	1996
11	2020	-0.11	0.19	0.25	22462	18776	2395
12	2021	-0.15	0.16	0.17	19565	19520	2364
13	2022	0.02	0.17	0.19	16414	20660	2252
14	2023	0.11	0.20	0.22	14457	18544	1998
15	2024	0.16	0.17	0.13	3300	4211	590

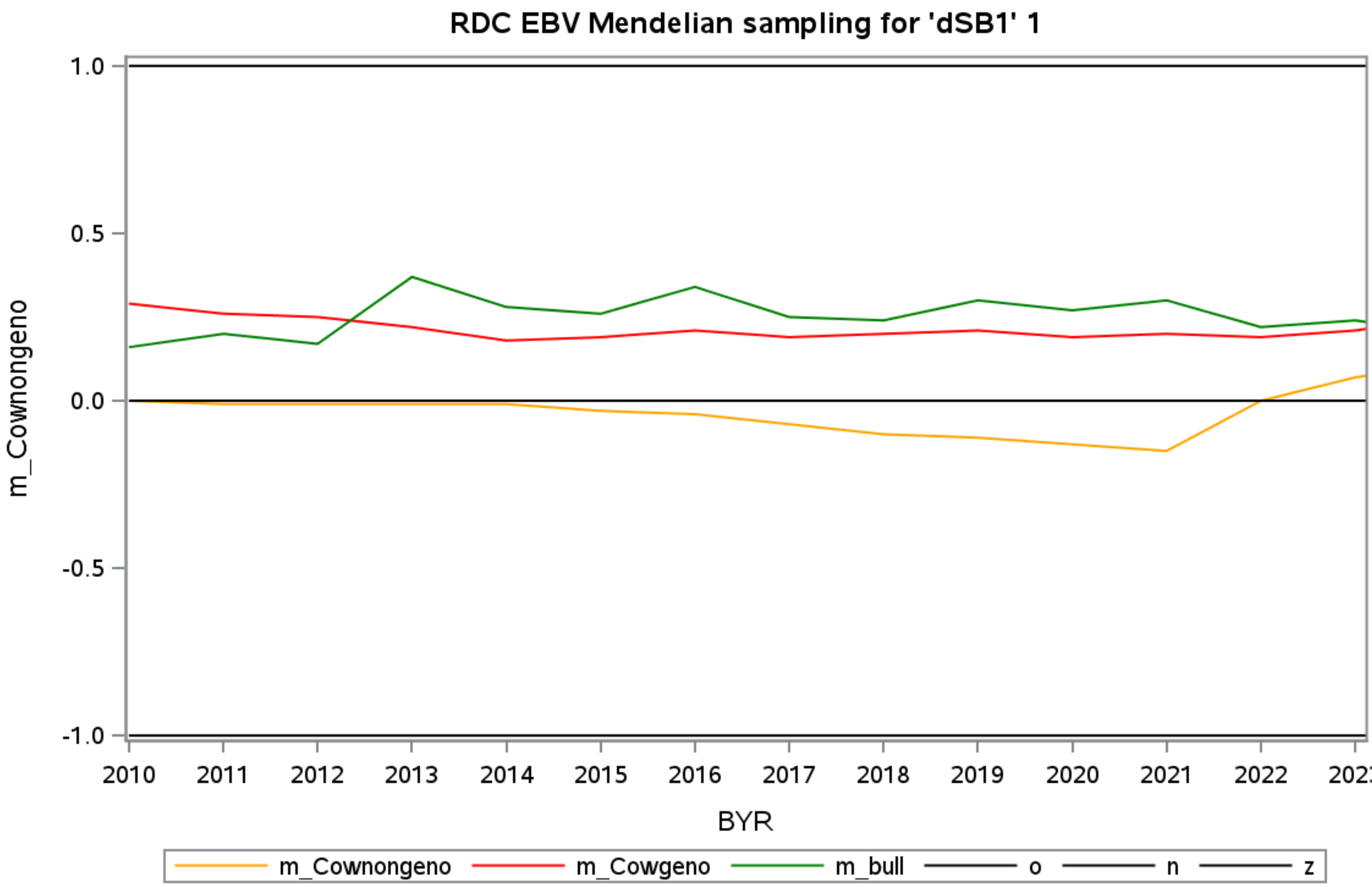


Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	0.00	0.05	0.16	76585	2302	696
2	2011	0.02	0.07	0.05	72324	4327	1130
3	2012	0.00	0.01	0.00	65311	5074	1420
4	2013	0.01	0.04	0.07	62402	5619	1520
5	2014	0.01	-0.01	0.06	57824	6290	1685
6	2015	0.02	0.06	0.00	51438	8306	1903
7	2016	0.01	0.02	-0.04	43973	11236	1869
8	2017	0.01	0.04	0.03	36024	14397	2108
9	2018	-0.01	-0.01	0.02	30486	16542	2060
10	2019	0.04	0.01	0.02	26086	16991	1996
11	2020	0.02	0.02	0.04	22462	18776	2395
12	2021	0.04	0.02	0.01	19565	19520	2364
13	2022	0.01	0.00	0.00	16414	20660	2252
14	2023	0.05	0.04	0.05	14457	18544	1998
15	2024	0.04	0.05	0.08	3300	4211	590



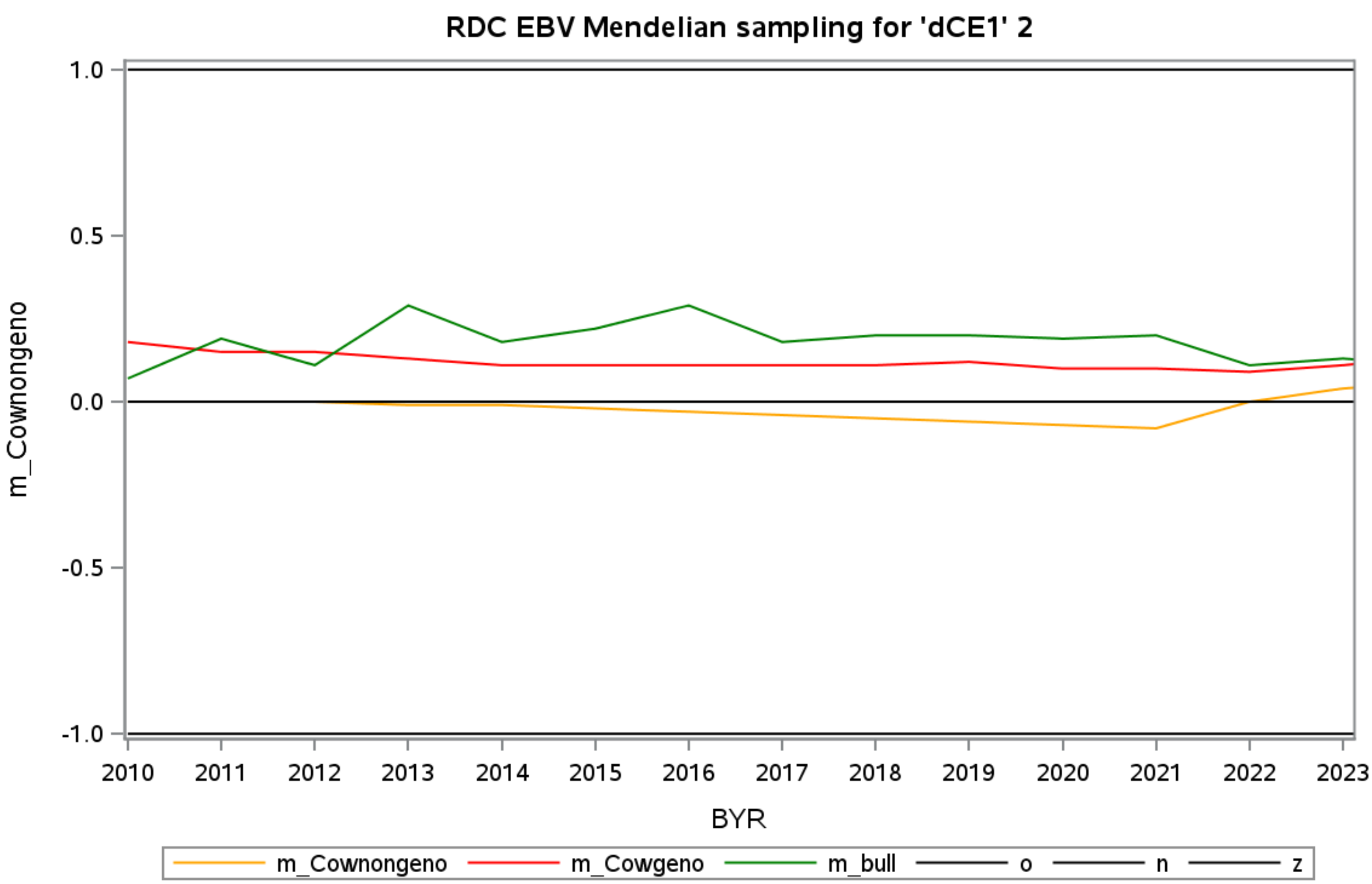
RDC EBV Mendelian sampling for 'dSB1' 1

Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	0.00	0.29	0.16	77402	2250	531
2	2011	-0.01	0.26	0.20	73052	4219	959
3	2012	-0.01	0.25	0.17	66016	4756	1136
4	2013	-0.01	0.22	0.37	63075	4900	1168
5	2014	-0.01	0.18	0.28	58459	5325	1272
6	2015	-0.03	0.19	0.26	51951	6890	1281
7	2016	-0.04	0.21	0.34	44538	9522	1219
8	2017	-0.07	0.19	0.25	36640	12080	1442
9	2018	-0.10	0.20	0.24	30979	13499	1376
10	2019	-0.11	0.21	0.30	26598	13522	1350
11	2020	-0.13	0.19	0.27	22871	14366	1570
12	2021	-0.15	0.20	0.30	19994	14117	1266
13	2022	0.00	0.19	0.22	16740	13422	1229
14	2023	0.07	0.21	0.24	14767	11276	1105
15	2024	0.11	0.25	0.20	3370	1869	180



RDC EBV Mendelian sampling for 'dCE1' 2

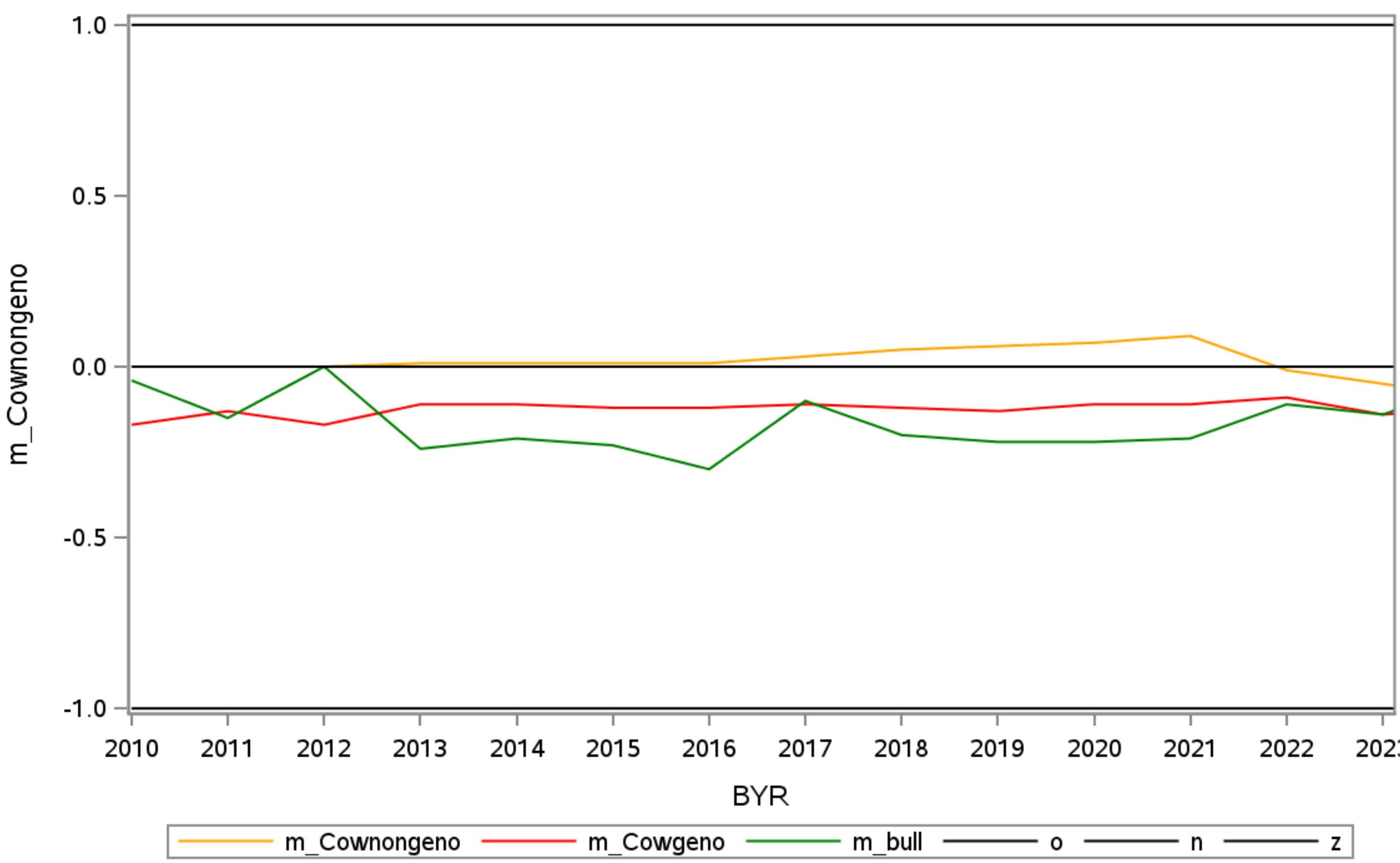
Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	0.00	0.18	0.07	77402	2250	531
2	2011	0.00	0.15	0.19	73052	4219	959
3	2012	0.00	0.15	0.11	66016	4756	1136
4	2013	-0.01	0.13	0.29	63075	4900	1168
5	2014	-0.01	0.11	0.18	58459	5325	1272
6	2015	-0.02	0.11	0.22	51951	6890	1281
7	2016	-0.03	0.11	0.29	44538	9522	1219
8	2017	-0.04	0.11	0.18	36640	12080	1442
9	2018	-0.05	0.11	0.20	30979	13499	1376
10	2019	-0.06	0.12	0.20	26598	13522	1350
11	2020	-0.07	0.10	0.19	22871	14366	1570
12	2021	-0.08	0.10	0.20	19994	14117	1266
13	2022	0.00	0.09	0.11	16740	13422	1229
14	2023	0.04	0.11	0.13	14767	11276	1105
15	2024	0.06	0.14	0.11	3370	1869	180



RDC EBV Mendelian sampling for 'dCS1' 3

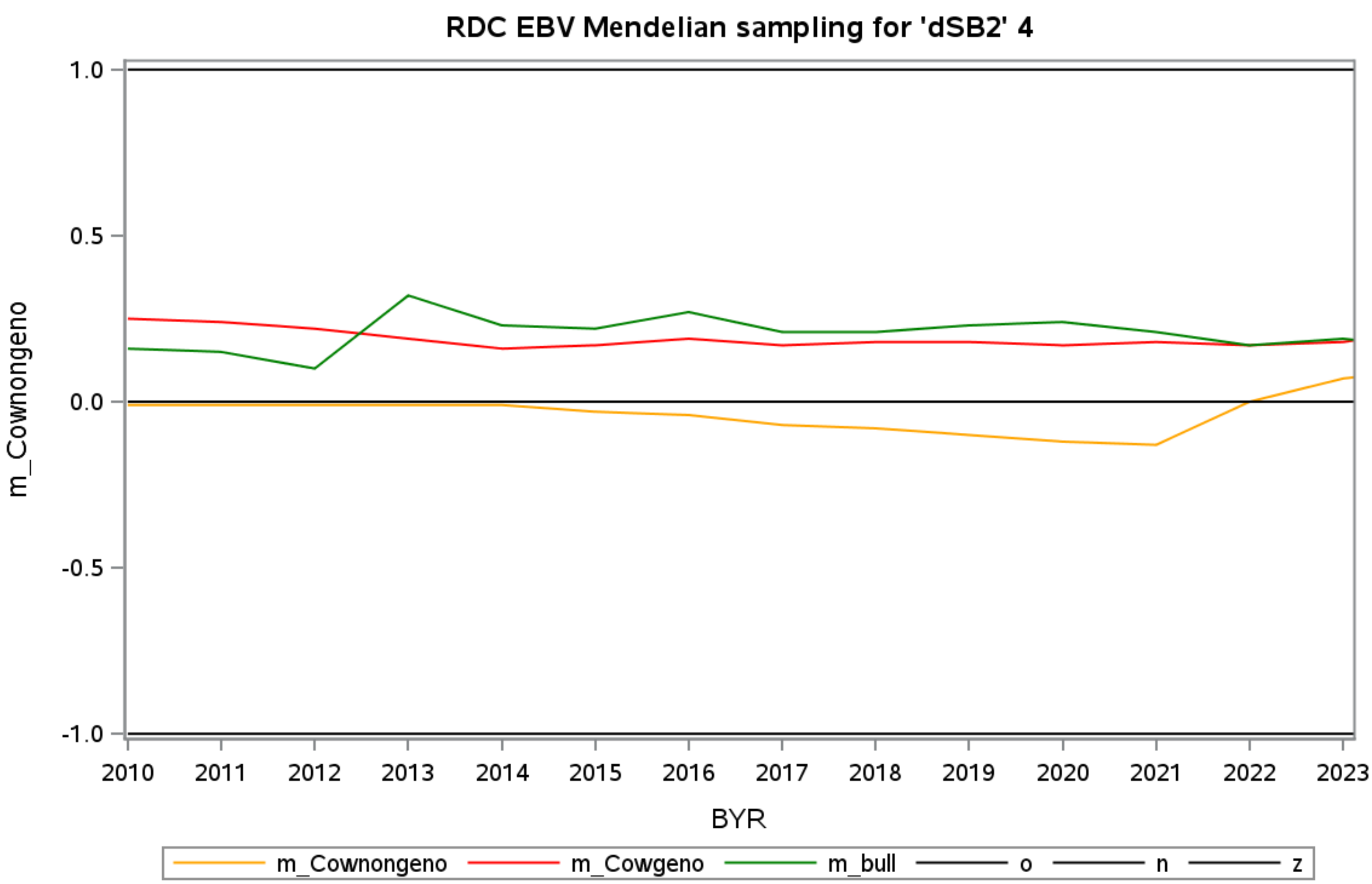
Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	0.00	-0.17	-0.04	77402	2250	531
2	2011	0.00	-0.13	-0.15	73052	4219	959
3	2012	0.00	-0.17	0.00	66016	4756	1136
4	2013	0.01	-0.11	-0.24	63075	4900	1168
5	2014	0.01	-0.11	-0.21	58459	5325	1272
6	2015	0.01	-0.12	-0.23	51951	6890	1281
7	2016	0.01	-0.12	-0.30	44538	9522	1219
8	2017	0.03	-0.11	-0.10	36640	12080	1442
9	2018	0.05	-0.12	-0.20	30979	13499	1376
10	2019	0.06	-0.13	-0.22	26598	13522	1350
11	2020	0.07	-0.11	-0.22	22871	14366	1570
12	2021	0.09	-0.11	-0.21	19994	14117	1266
13	2022	-0.01	-0.09	-0.11	16740	13422	1229
14	2023	-0.05	-0.14	-0.14	14767	11276	1105
15	2024	-0.09	-0.12	-0.04	3370	1869	180

RDC EBV Mendelian sampling for 'dCS1' 3



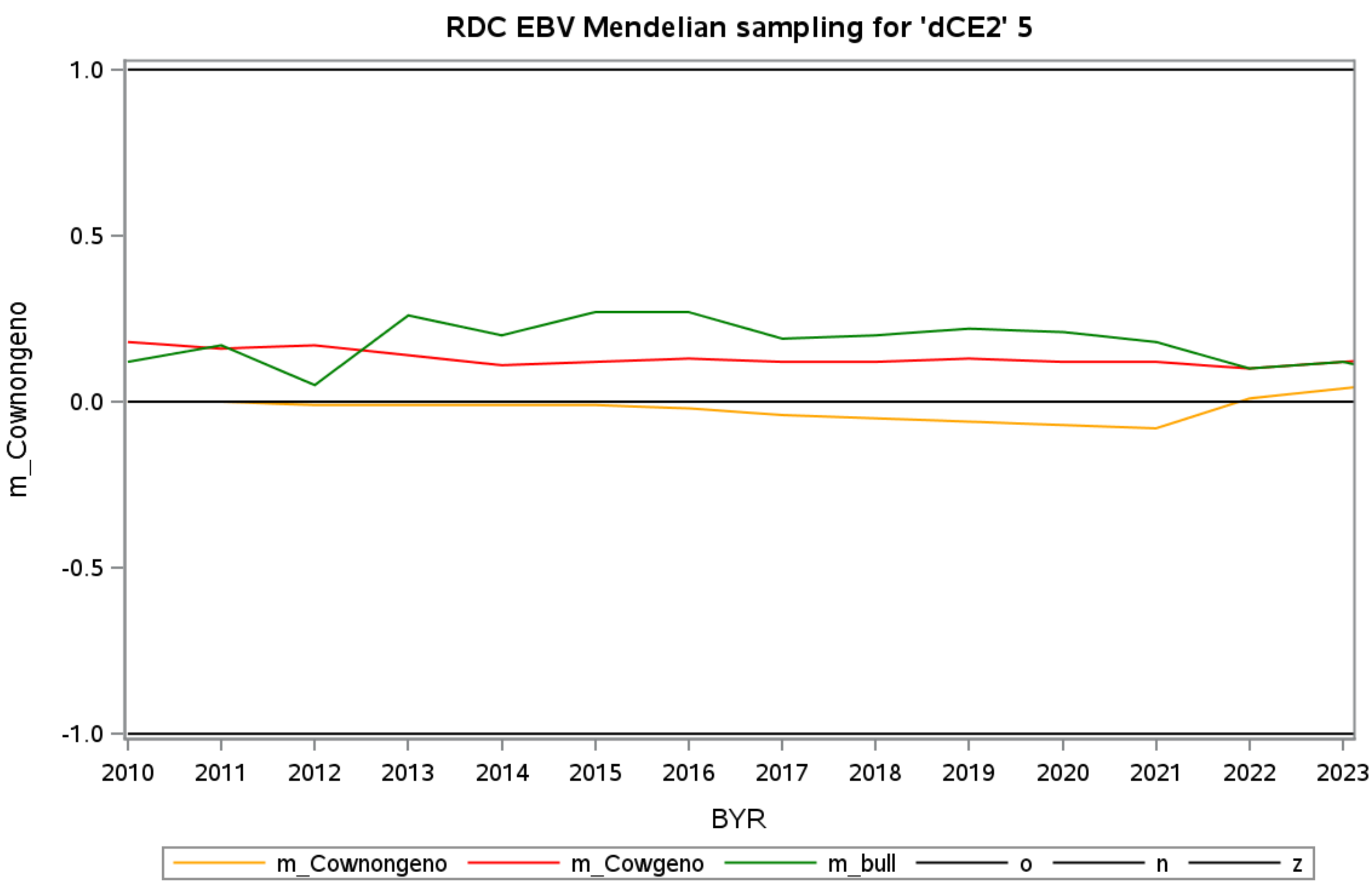
RDC EBV Mendelian sampling for 'dSB2' 4

Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	-0.01	0.25	0.16	77402	2250	531
2	2011	-0.01	0.24	0.15	73052	4219	959
3	2012	-0.01	0.22	0.10	66016	4756	1136
4	2013	-0.01	0.19	0.32	63075	4900	1168
5	2014	-0.01	0.16	0.23	58459	5325	1272
6	2015	-0.03	0.17	0.22	51951	6890	1281
7	2016	-0.04	0.19	0.27	44538	9522	1219
8	2017	-0.07	0.17	0.21	36640	12080	1442
9	2018	-0.08	0.18	0.21	30979	13499	1376
10	2019	-0.10	0.18	0.23	26598	13522	1350
11	2020	-0.12	0.17	0.24	22871	14366	1570
12	2021	-0.13	0.18	0.21	19994	14117	1266
13	2022	0.00	0.17	0.17	16740	13422	1229
14	2023	0.07	0.18	0.19	14767	11276	1105
15	2024	0.10	0.22	0.16	3370	1869	180



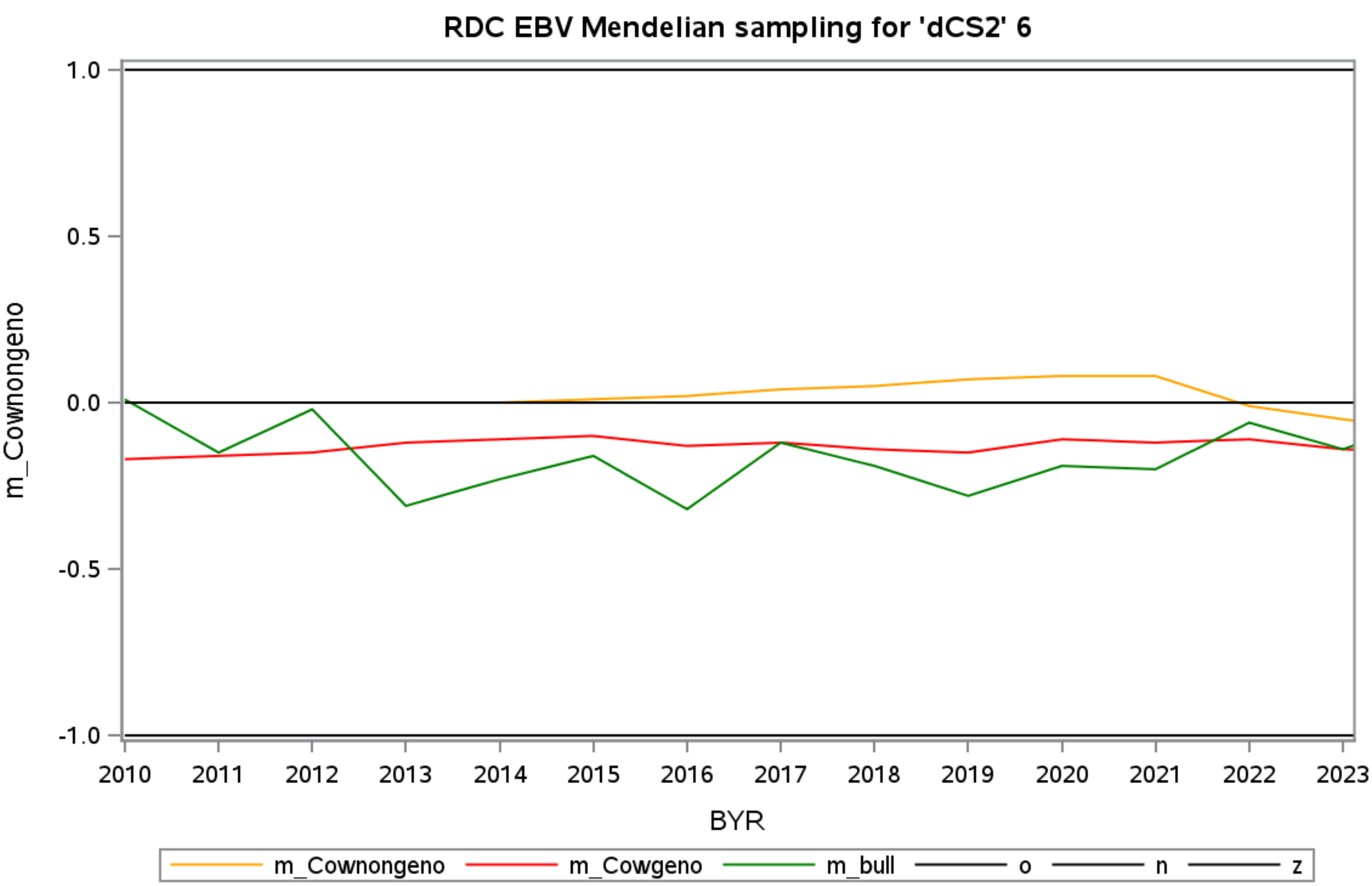
RDC EBV Mendelian sampling for 'dCE2' 5

Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	0.00	0.18	0.12	77402	2250	531
2	2011	0.00	0.16	0.17	73052	4219	959
3	2012	-0.01	0.17	0.05	66016	4756	1136
4	2013	-0.01	0.14	0.26	63075	4900	1168
5	2014	-0.01	0.11	0.20	58459	5325	1272
6	2015	-0.01	0.12	0.27	51951	6890	1281
7	2016	-0.02	0.13	0.27	44538	9522	1219
8	2017	-0.04	0.12	0.19	36640	12080	1442
9	2018	-0.05	0.12	0.20	30979	13499	1376
10	2019	-0.06	0.13	0.22	26598	13522	1350
11	2020	-0.07	0.12	0.21	22871	14366	1570
12	2021	-0.08	0.12	0.18	19994	14117	1266
13	2022	0.01	0.10	0.10	16740	13422	1229
14	2023	0.04	0.12	0.12	14767	11276	1105
15	2024	0.07	0.14	0.06	3370	1869	180



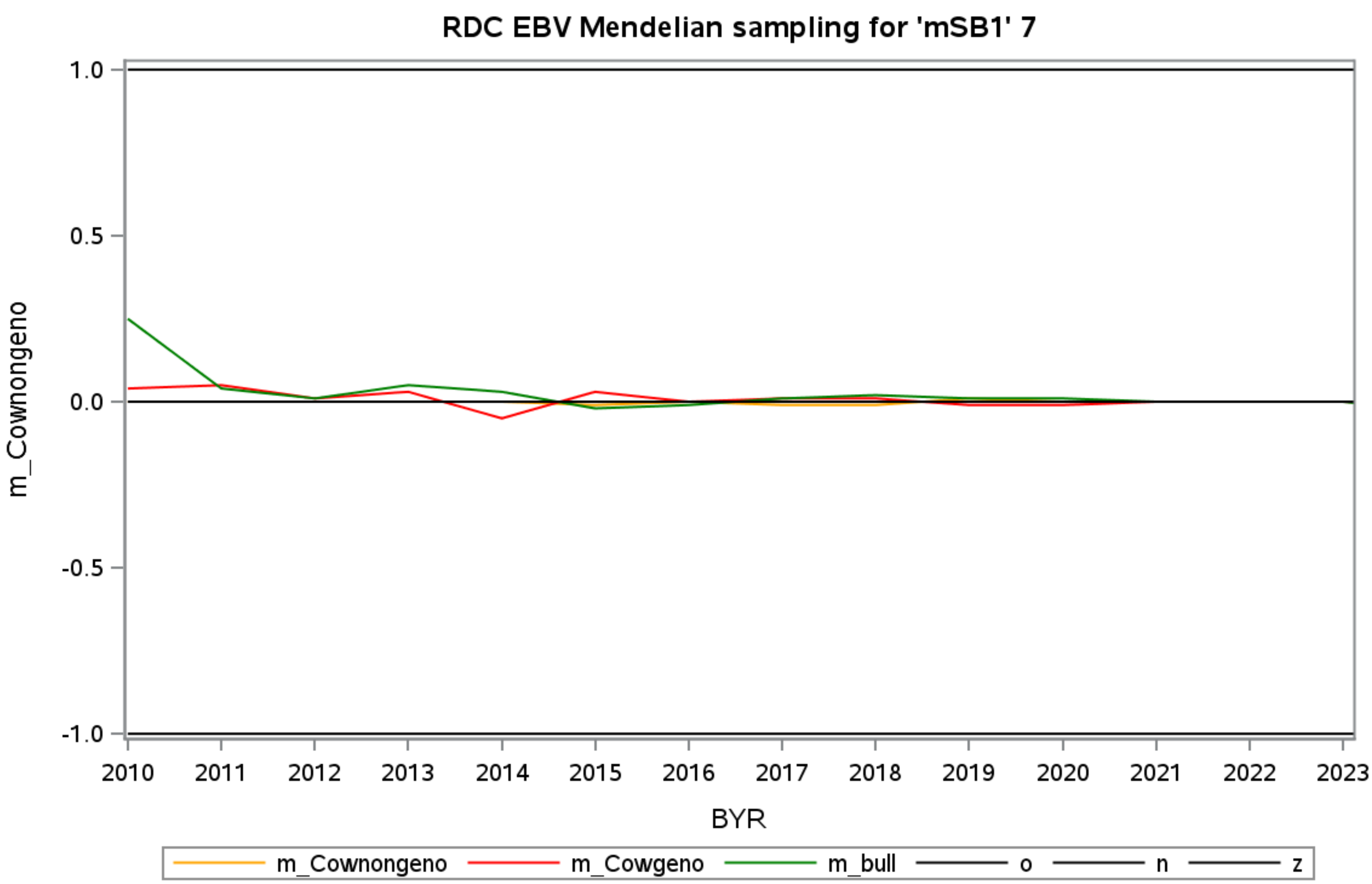
RDC EBV Mendelian sampling for 'dCS2' 6

Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	0.00	-0.17	0.01	77402	2250	531
2	2011	0.00	-0.16	-0.15	73052	4219	959
3	2012	0.00	-0.15	-0.02	66016	4756	1136
4	2013	0.00	-0.12	-0.31	63075	4900	1168
5	2014	0.00	-0.11	-0.23	58459	5325	1272
6	2015	0.01	-0.10	-0.16	51951	6890	1281
7	2016	0.02	-0.13	-0.32	44538	9522	1219
8	2017	0.04	-0.12	-0.12	36640	12080	1442
9	2018	0.05	-0.14	-0.19	30979	13499	1376
10	2019	0.07	-0.15	-0.28	26598	13522	1350
11	2020	0.08	-0.11	-0.19	22871	14366	1570
12	2021	0.08	-0.12	-0.20	19994	14117	1266
13	2022	-0.01	-0.11	-0.06	16740	13422	1229
14	2023	-0.05	-0.14	-0.14	14767	11276	1105
15	2024	-0.08	-0.15	-0.04	3370	1869	180



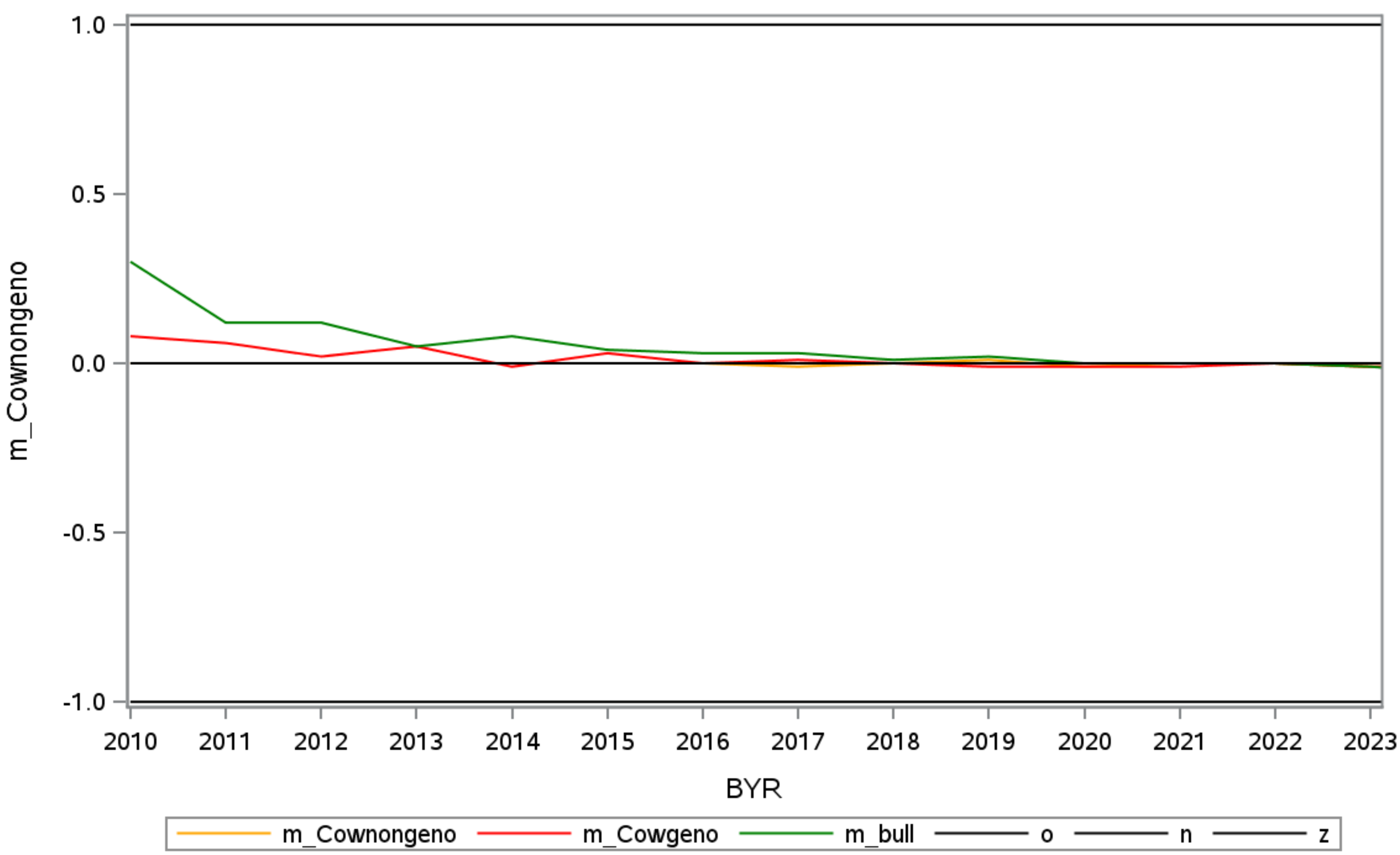
RDC EBV Mendelian sampling for 'mSB1' 7

Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	0.00	0.04	0.25	77402	2250	531
2	2011	0.00	0.05	0.04	73052	4219	959
3	2012	0.00	0.01	0.01	66016	4756	1136
4	2013	0.00	0.03	0.05	63075	4900	1168
5	2014	0.00	-0.05	0.03	58459	5325	1272
6	2015	-0.01	0.03	-0.02	51951	6890	1281
7	2016	0.00	0.00	-0.01	44538	9522	1219
8	2017	-0.01	0.01	0.01	36640	12080	1442
9	2018	-0.01	0.01	0.02	30979	13499	1376
10	2019	0.01	-0.01	0.01	26598	13522	1350
11	2020	0.00	-0.01	0.01	22871	14366	1570
12	2021	0.00	0.00	0.00	19994	14117	1266
13	2022	0.00	0.00	0.00	16740	13422	1229
14	2023	0.00	0.00	0.00	14767	11276	1105
15	2024	0.00	-0.01	-0.03	3370	1869	180



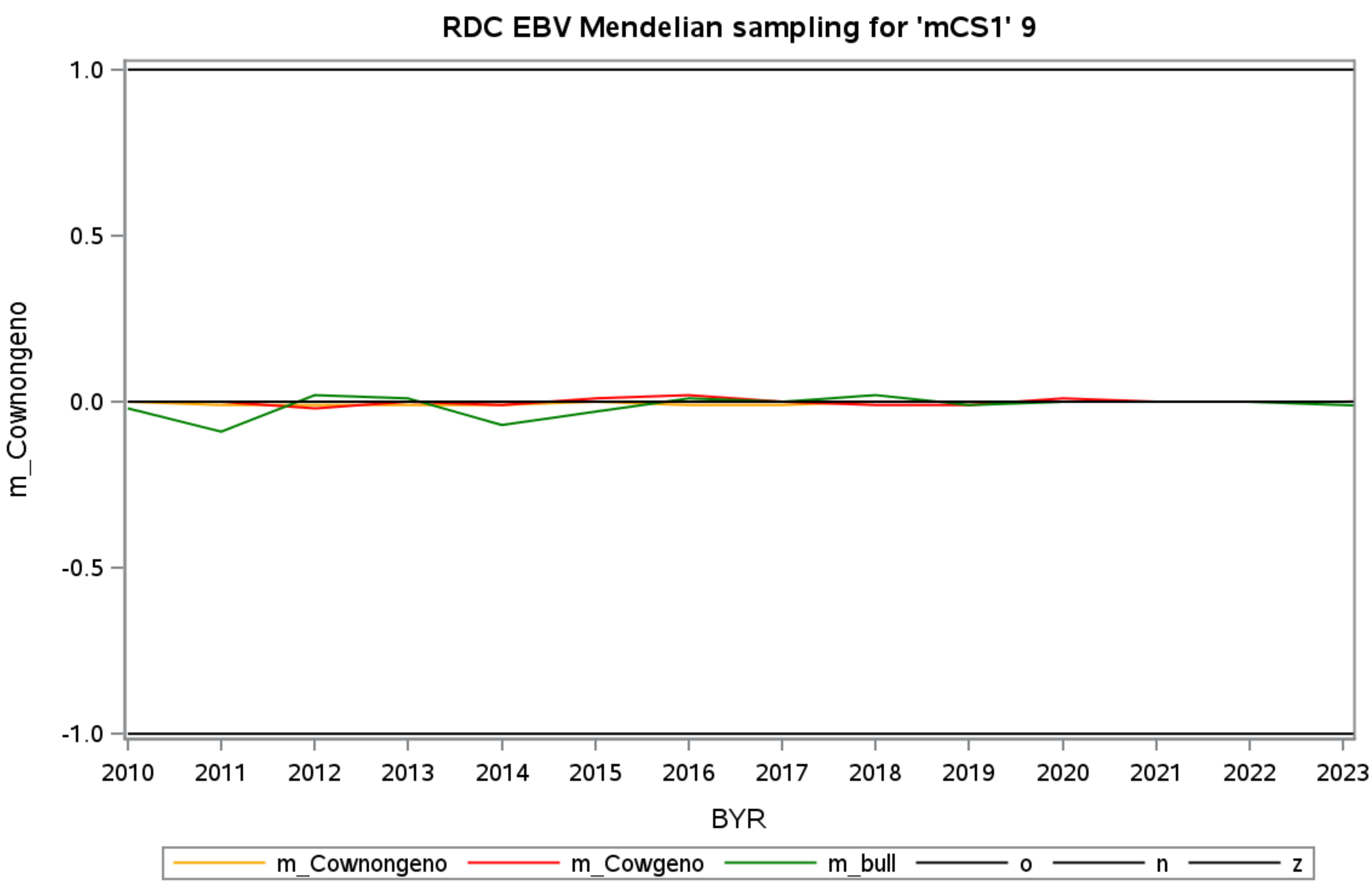
Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	0.00	0.08	0.30	77402	2250	531
2	2011	0.00	0.06	0.12	73052	4219	959
3	2012	0.00	0.02	0.12	66016	4756	1136
4	2013	0.00	0.05	0.05	63075	4900	1168
5	2014	0.00	-0.01	0.08	58459	5325	1272
6	2015	0.00	0.03	0.04	51951	6890	1281
7	2016	0.00	0.00	0.03	44538	9522	1219
8	2017	-0.01	0.01	0.03	36640	12080	1442
9	2018	0.00	0.00	0.01	30979	13499	1376
10	2019	0.01	-0.01	0.02	26598	13522	1350
11	2020	-0.01	-0.01	0.00	22871	14366	1570
12	2021	0.00	-0.01	0.00	19994	14117	1266
13	2022	0.00	0.00	0.00	16740	13422	1229
14	2023	-0.01	-0.01	-0.01	14767	11276	1105
15	2024	-0.01	-0.01	-0.03	3370	1869	180

RDC EBV Mendelian sampling for 'mCE1' 8



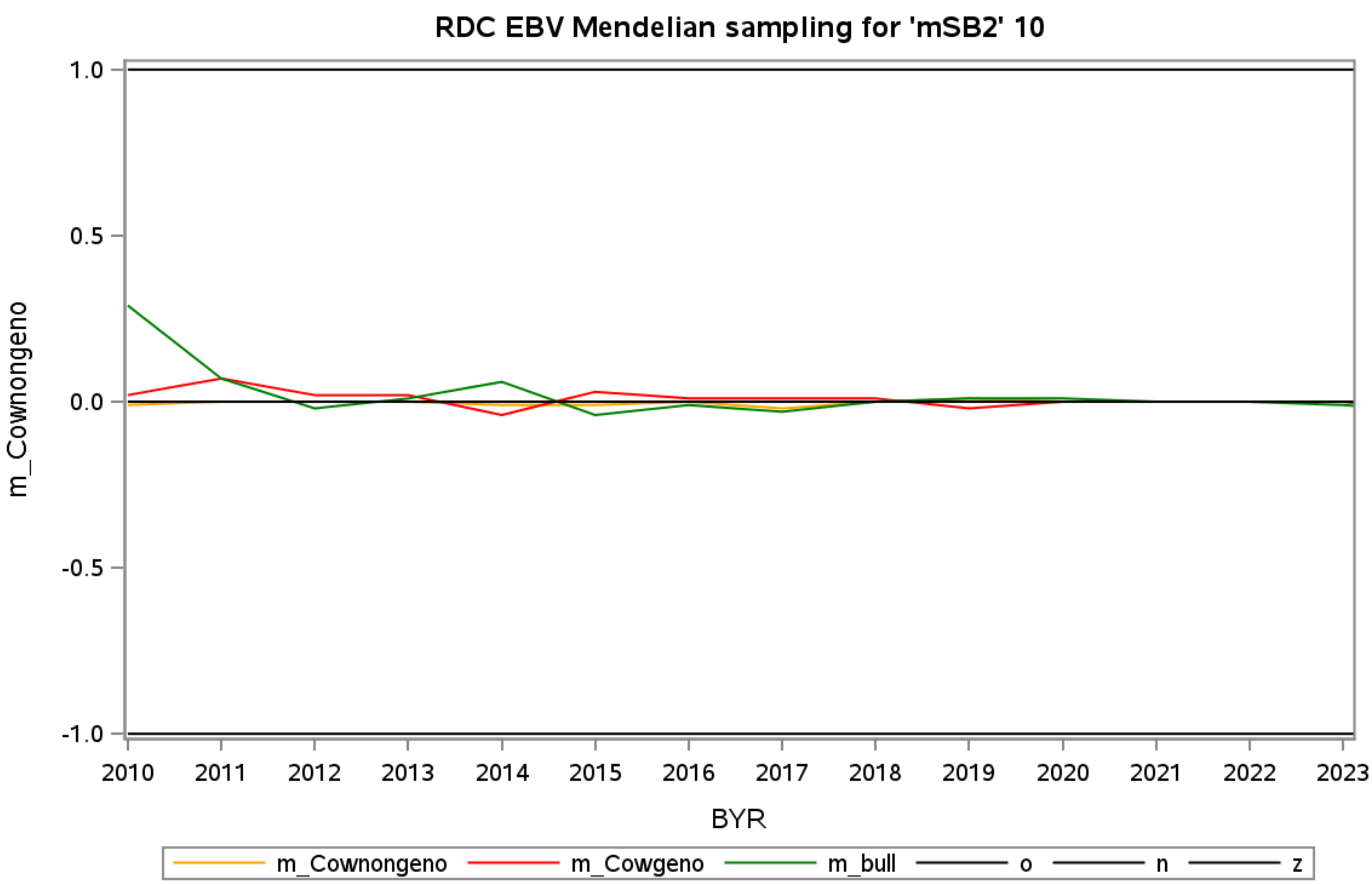
RDC EBV Mendelian sampling for 'mCS1' 9

Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	0.00	0.00	-0.02	77402	2250	531
2	2011	-0.01	0.00	-0.09	73052	4219	959
3	2012	-0.01	-0.02	0.02	66016	4756	1136
4	2013	-0.01	0.00	0.01	63075	4900	1168
5	2014	-0.01	-0.01	-0.07	58459	5325	1272
6	2015	0.00	0.01	-0.03	51951	6890	1281
7	2016	-0.01	0.02	0.01	44538	9522	1219
8	2017	-0.01	0.00	0.00	36640	12080	1442
9	2018	0.00	-0.01	0.02	30979	13499	1376
10	2019	0.00	-0.01	-0.01	26598	13522	1350
11	2020	0.00	0.01	0.00	22871	14366	1570
12	2021	0.00	0.00	0.00	19994	14117	1266
13	2022	0.00	0.00	0.00	16740	13422	1229
14	2023	0.00	0.00	-0.01	14767	11276	1105
15	2024	0.00	0.01	-0.02	3370	1869	180



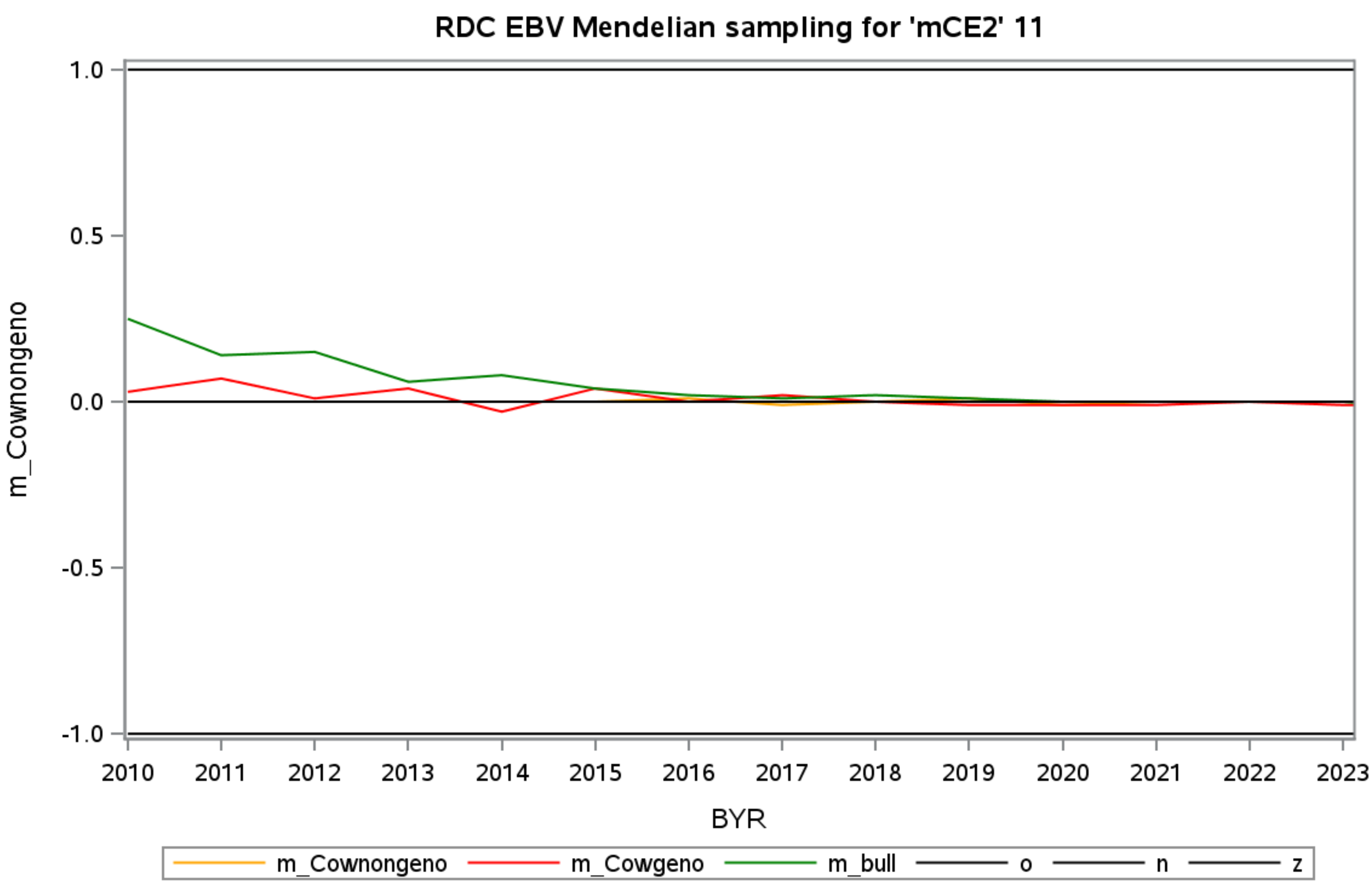
RDC EBV Mendelian sampling for 'mSB2' 10

Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	-0.01	0.02	0.29	77402	2250	531
2	2011	0.00	0.07	0.07	73052	4219	959
3	2012	0.00	0.02	-0.02	66016	4756	1136
4	2013	0.00	0.02	0.01	63075	4900	1168
5	2014	-0.01	-0.04	0.06	58459	5325	1272
6	2015	-0.01	0.03	-0.04	51951	6890	1281
7	2016	0.00	0.01	-0.01	44538	9522	1219
8	2017	-0.02	0.01	-0.03	36640	12080	1442
9	2018	0.00	0.01	0.00	30979	13499	1376
10	2019	0.01	-0.02	0.01	26598	13522	1350
11	2020	0.00	0.00	0.01	22871	14366	1570
12	2021	0.00	0.00	0.00	19994	14117	1266
13	2022	0.00	0.00	0.00	16740	13422	1229
14	2023	0.00	0.00	-0.01	14767	11276	1105
15	2024	-0.01	-0.03	-0.03	3370	1869	180



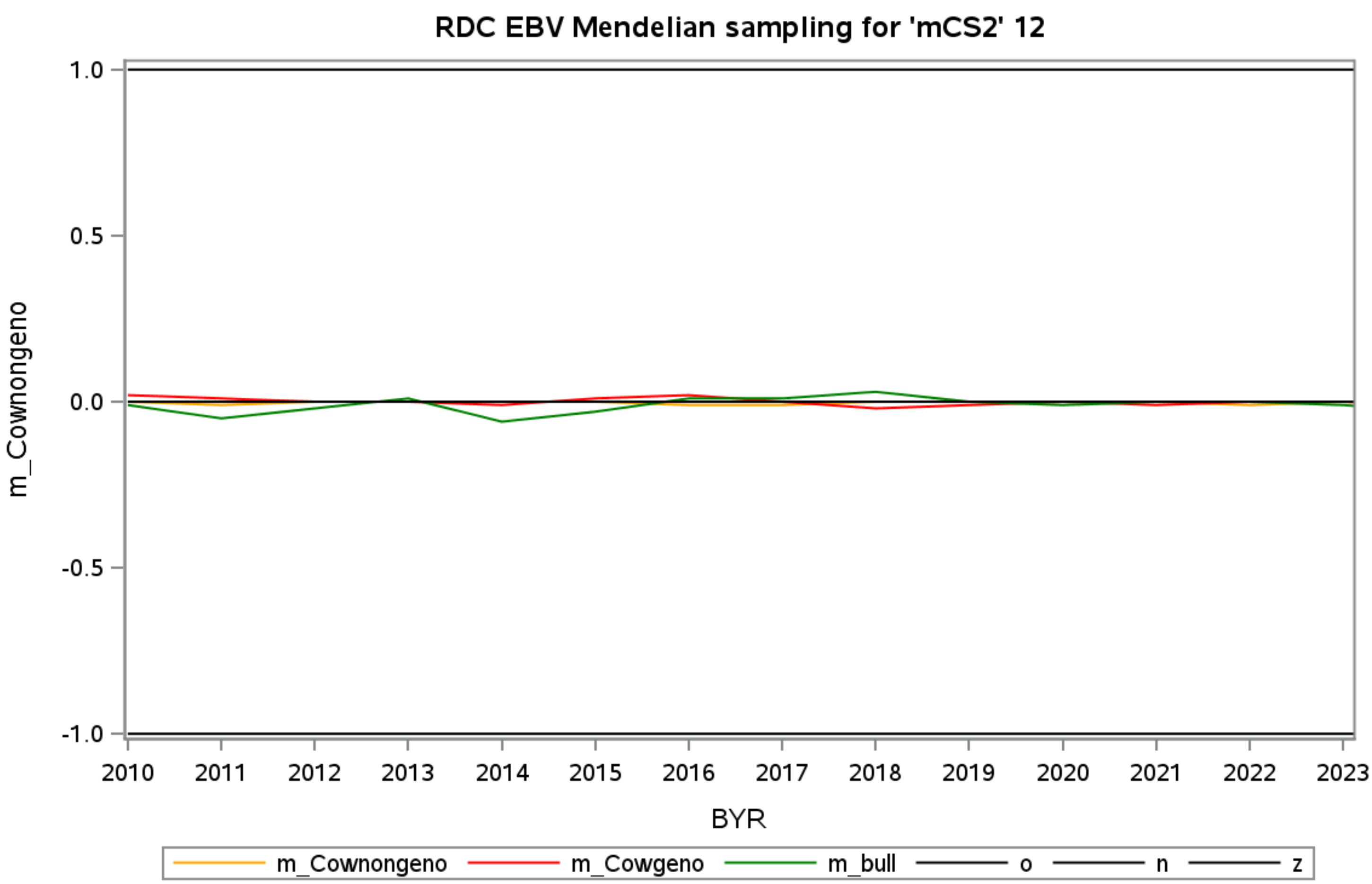
RDC EBV Mendelian sampling for 'mCE2' 11

Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	0.00	0.03	0.25	77402	2250	531
2	2011	0.00	0.07	0.14	73052	4219	959
3	2012	0.00	0.01	0.15	66016	4756	1136
4	2013	0.00	0.04	0.06	63075	4900	1168
5	2014	0.00	-0.03	0.08	58459	5325	1272
6	2015	0.00	0.04	0.04	51951	6890	1281
7	2016	0.01	0.00	0.02	44538	9522	1219
8	2017	-0.01	0.02	0.01	36640	12080	1442
9	2018	0.00	0.00	0.02	30979	13499	1376
10	2019	0.01	-0.01	0.01	26598	13522	1350
11	2020	-0.01	-0.01	0.00	22871	14366	1570
12	2021	0.00	-0.01	0.00	19994	14117	1266
13	2022	0.00	0.00	0.00	16740	13422	1229
14	2023	0.00	-0.01	0.00	14767	11276	1105
15	2024	-0.01	-0.01	-0.02	3370	1869	180



RDC EBV Mendelian sampling for 'mCS2' 12

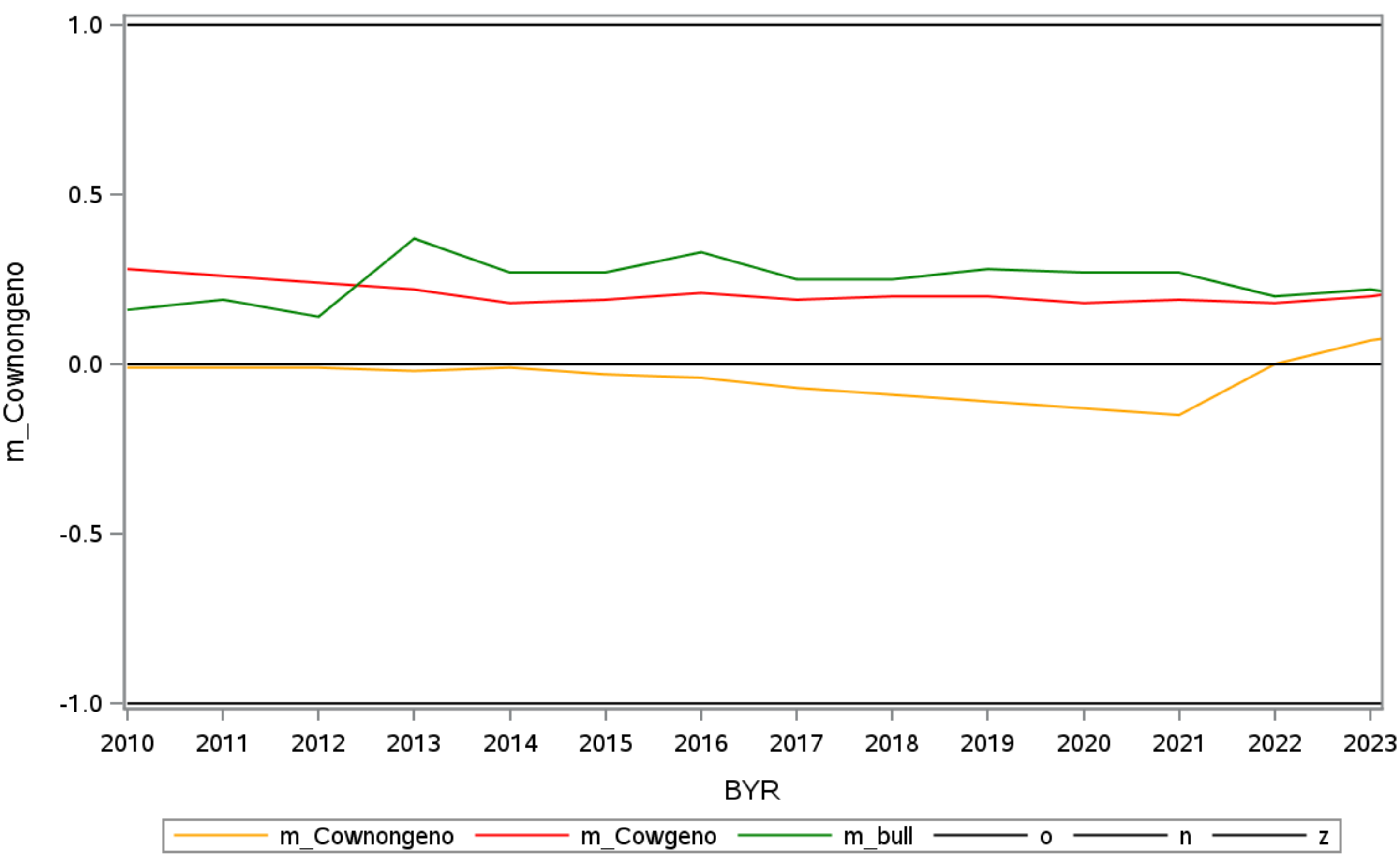
Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	0.00	0.02	-0.01	77402	2250	531
2	2011	-0.01	0.01	-0.05	73052	4219	959
3	2012	0.00	0.00	-0.02	66016	4756	1136
4	2013	0.00	0.00	0.01	63075	4900	1168
5	2014	0.00	-0.01	-0.06	58459	5325	1272
6	2015	0.00	0.01	-0.03	51951	6890	1281
7	2016	-0.01	0.02	0.01	44538	9522	1219
8	2017	-0.01	0.00	0.01	36640	12080	1442
9	2018	0.00	-0.02	0.03	30979	13499	1376
10	2019	0.00	-0.01	0.00	26598	13522	1350
11	2020	0.00	0.00	-0.01	22871	14366	1570
12	2021	0.00	-0.01	0.00	19994	14117	1266
13	2022	-0.01	0.00	0.00	16740	13422	1229
14	2023	0.00	0.00	-0.01	14767	11276	1105
15	2024	-0.01	-0.01	-0.03	3370	1869	180



RDC EBV Mendelian sampling for 'brth' 13

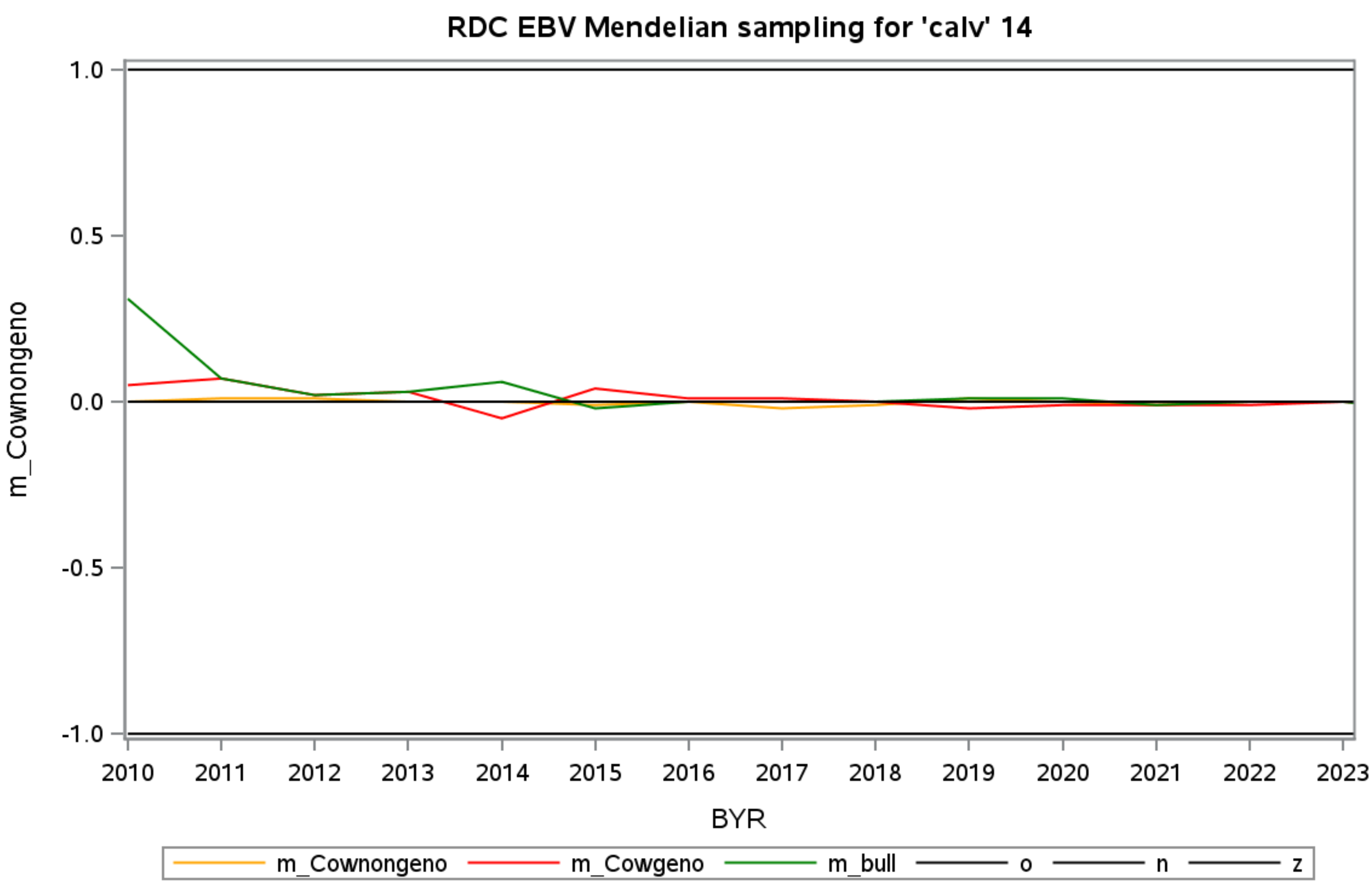
Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	-0.01	0.28	0.16	77402	2250	531
2	2011	-0.01	0.26	0.19	73052	4219	959
3	2012	-0.01	0.24	0.14	66016	4756	1136
4	2013	-0.02	0.22	0.37	63075	4900	1168
5	2014	-0.01	0.18	0.27	58459	5325	1272
6	2015	-0.03	0.19	0.27	51951	6890	1281
7	2016	-0.04	0.21	0.33	44538	9522	1219
8	2017	-0.07	0.19	0.25	36640	12080	1442
9	2018	-0.09	0.20	0.25	30979	13499	1376
10	2019	-0.11	0.20	0.28	26598	13522	1350
11	2020	-0.13	0.18	0.27	22871	14366	1570
12	2021	-0.15	0.19	0.27	19994	14117	1266
13	2022	0.00	0.18	0.20	16740	13422	1229
14	2023	0.07	0.20	0.22	14767	11276	1105
15	2024	0.11	0.24	0.18	3370	1869	180

RDC EBV Mendelian sampling for 'brth' 13



RDC EBV Mendelian sampling for 'calv' 14

Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	0.00	0.05	0.31	77402	2250	531
2	2011	0.01	0.07	0.07	73052	4219	959
3	2012	0.01	0.02	0.02	66016	4756	1136
4	2013	0.00	0.03	0.03	63075	4900	1168
5	2014	0.00	-0.05	0.06	58459	5325	1272
6	2015	-0.01	0.04	-0.02	51951	6890	1281
7	2016	0.00	0.01	0.00	44538	9522	1219
8	2017	-0.02	0.01	0.00	36640	12080	1442
9	2018	-0.01	0.00	0.00	30979	13499	1376
10	2019	0.01	-0.02	0.01	26598	13522	1350
11	2020	0.00	-0.01	0.01	22871	14366	1570
12	2021	-0.01	-0.01	-0.01	19994	14117	1266
13	2022	0.00	-0.01	0.00	16740	13422	1229
14	2023	0.00	0.00	0.00	14767	11276	1105
15	2024	0.00	-0.02	-0.03	3370	1869	180



JER datacut EBV (me) and official EBV (e) for nongenotyped females with phenotype

Obs	BYR	name	no	mean_me	mean_e	std_me	std_e	mean_dif	std_dif	corr
1	2000	dSB1	10572	95.2	101.2	6.7	7.1	-6.0	4.1	0.83
2	2001	dSB1	10925	96.5	102.2	6.6	6.8	-5.6	3.5	0.87
3	2002	dSB1	10321	95.4	100.6	6.2	6.6	-5.2	3.1	0.88
4	2003	dSB1	9805	96.8	101.7	5.9	6.2	-4.9	2.7	0.90
5	2004	dSB1	9796	95.7	99.9	5.9	6.4	-4.3	2.9	0.90
6	2005	dSB1	9545	94.6	98.4	5.8	6.1	-3.8	2.4	0.92
7	2006	dSB1	9674	94.5	97.9	5.8	6.1	-3.4	2.4	0.92
8	2007	dSB1	9525	94.2	97.2	5.4	5.6	-3.0	2.2	0.92
9	2008	dSB1	10285	93.6	96.4	5.3	5.7	-2.8	2.3	0.92
10	2009	dSB1	11170	94.0	96.4	5.3	5.4	-2.5	1.9	0.94
11	2010	dSB1	10724	95.0	97.1	5.8	5.7	-2.1	1.8	0.95
12	2011	dSB1	10826	95.2	96.9	5.7	5.7	-1.8	1.7	0.95
13	2012	dSB1	10427	97.3	98.8	5.5	5.5	-1.5	1.8	0.95
14	2013	dSB1	10462	97.1	98.4	5.3	5.5	-1.3	2.3	0.91
15	2014	dSB1	10625	97.5	98.7	5.3	5.5	-1.1	2.0	0.94
16	2015	dSB1	9680	97.3	98.2	5.4	5.5	-0.9	1.8	0.95
17	2016	dSB1	9920	98.1	98.8	5.5	5.6	-0.6	1.6	0.96
18	2017	dSB1	9072	97.4	97.8	5.2	5.3	-0.5	1.8	0.94
19	2018	dSB1	9352	98.1	98.3	5.0	5.1	-0.2	1.6	0.95
20	2019	dSB1	9620	98.1	98.1	5.8	5.7	-0.1	1.6	0.96
21	2020	dSB1	11984	98.4	98.3	5.8	5.7	0.1	1.5	0.97
22	2021	dSB1	12606	100.8	100.5	6.0	5.9	0.3	1.6	0.97
23	2022	dSB1	14357	100.7	100.3	5.9	5.8	0.4	1.5	0.97
24	2023	dSB1	14194	101.9	101.2	6.0	5.9	0.6	1.6	0.96
25	2024	dSB1	3445	103.5	102.9	5.8	5.6	0.7	1.3	0.97
26	2000	dCE1	9126	99.4	105.5	7.4	8.2	-6.1	4.7	0.82
27	2001	dCE1	9700	99.5	105.5	6.2	7.1	-6.0	4.3	0.80
28	2002	dCE1	9305	99.6	105.4	6.4	7.0	-5.8	3.9	0.84
29	2003	dCE1	8901	98.2	104.1	5.9	6.5	-5.9	3.5	0.85
30	2004	dCE1	8702	97.8	102.7	6.4	7.0	-4.9	3.5	0.87
31	2005	dCE1	8558	96.5	101.0	5.9	6.3	-4.5	2.9	0.89
32	2006	dCE1	8765	97.4	101.2	6.6	6.9	-3.9	2.9	0.91
33	2007	dCE1	8813	95.8	99.3	5.3	5.6	-3.5	2.6	0.89
34	2008	dCE1	9475	95.5	98.7	5.5	5.9	-3.2	2.8	0.89
35	2009	dCE1	10419	95.4	98.3	5.8	5.8	-2.9	2.2	0.93
36	2010	dCE1	10069	97.1	99.7	5.8	5.6	-2.6	2.1	0.94
37	2011	dCE1	10196	97.8	100.0	5.3	5.2	-2.2	2.0	0.93

JER datacut EBV (me) and official EBV (e) for nongenotyped females with phenotype

Obs	BYR	name	no	mean_me	mean_e	std_me	std_e	mean_dif	std_dif	corr
38	2012	dCE1	9827	99.5	101.3	5.7	5.6	-1.8	2.1	0.93
39	2013	dCE1	9885	100.0	101.5	5.3	5.6	-1.5	2.9	0.86
40	2014	dCE1	10137	100.1	101.5	5.4	5.2	-1.3	1.9	0.94
41	2015	dCE1	9222	99.5	100.5	5.4	5.3	-1.1	2.1	0.92
42	2016	dCE1	9499	100.8	101.4	5.4	5.2	-0.7	1.8	0.94
43	2017	dCE1	8596	99.6	100.1	5.8	5.7	-0.5	2.1	0.93
44	2018	dCE1	8713	100.3	100.5	4.7	4.6	-0.2	1.8	0.92
45	2019	dCE1	8884	99.3	99.4	5.2	5.1	-0.1	1.8	0.94
46	2020	dCE1	11146	100.1	100.0	4.7	4.7	0.1	1.7	0.93
47	2021	dCE1	11847	100.1	99.8	4.7	4.8	0.3	1.9	0.92
48	2022	dCE1	13359	100.3	99.8	4.1	4.1	0.5	1.8	0.90
49	2023	dCE1	12788	100.7	100.0	4.3	4.2	0.7	1.9	0.90
50	2024	dCE1	3091	102.5	101.7	4.3	4.2	0.8	1.6	0.93
51	2000	dCS1	8169	93.9	93.6	6.6	6.8	0.3	2.2	0.94
52	2001	dCS1	8649	94.8	94.3	6.3	6.4	0.5	2.0	0.95
53	2002	dCS1	8188	94.2	94.0	7.2	7.3	0.2	1.4	0.98
54	2003	dCS1	7783	95.8	95.6	6.4	6.5	0.2	1.3	0.98
55	2004	dCS1	7517	96.3	96.1	6.5	6.6	0.2	1.1	0.99
56	2005	dCS1	7188	95.7	95.6	6.5	6.5	0.1	0.9	0.99
57	2006	dCS1	7203	95.4	95.3	6.2	6.3	0.2	0.8	0.99
58	2007	dCS1	6905	96.9	96.9	6.2	6.2	0.1	0.7	0.99
59	2008	dCS1	8493	97.7	97.7	5.9	5.9	0.1	0.7	0.99
60	2009	dCS1	9416	99.4	99.3	6.0	6.0	0.0	0.6	1.00
61	2010	dCS1	8960	98.2	98.2	6.0	6.1	0.1	0.6	1.00
62	2011	dCS1	8979	97.6	97.6	5.7	5.7	0.0	0.5	1.00
63	2012	dCS1	8665	97.0	97.0	5.7	5.7	0.0	0.5	1.00
64	2013	dCS1	8762	96.4	96.4	5.3	5.3	0.0	0.5	1.00
65	2014	dCS1	9195	96.4	96.4	5.4	5.4	0.0	0.4	1.00
66	2015	dCS1	8594	97.7	97.7	6.2	6.2	0.0	0.5	1.00
67	2016	dCS1	9028	97.4	97.4	5.5	5.5	0.0	0.4	1.00
68	2017	dCS1	8143	98.1	98.1	5.3	5.3	0.0	0.4	1.00
69	2018	dCS1	8291	98.7	98.7	4.6	4.6	0.0	0.4	1.00
70	2019	dCS1	8614	99.7	99.7	4.9	4.8	0.0	0.4	1.00
71	2020	dCS1	10814	99.3	99.4	4.3	4.3	0.0	0.4	1.00
72	2021	dCS1	11512	100.4	100.5	4.1	4.1	0.0	0.4	1.00
73	2022	dCS1	13001	100.7	100.7	3.8	3.9	0.0	0.4	1.00
74	2023	dCS1	12467	100.7	100.8	4.0	4.0	-0.1	0.4	1.00

JER datacut EBV (me) and official EBV (e) for nongenotyped females with phenotype

Obs	BYR	name	no	mean_me	mean_e	std_me	std_e	mean_dif	std_dif	corr
75	2024	dCS1	3017	100.9	100.9	3.8	3.9	0.0	0.4	0.99
76	2000	dSB2	19692	93.7	102.1	8.0	9.0	-8.4	7.2	0.65
77	2001	dSB2	19048	94.1	102.2	7.7	8.4	-8.1	6.2	0.70
78	2002	dSB2	18705	94.0	102.1	6.1	7.0	-8.1	5.8	0.61
79	2003	dSB2	18234	93.9	101.3	6.3	7.5	-7.4	5.8	0.66
80	2004	dSB2	17490	93.6	100.2	6.5	7.3	-6.6	5.4	0.70
81	2005	dSB2	16846	93.5	99.5	6.7	7.4	-6.0	5.1	0.74
82	2006	dSB2	17086	93.8	99.4	6.3	7.1	-5.5	5.1	0.72
83	2007	dSB2	16765	93.9	99.2	5.6	6.4	-5.3	4.8	0.70
84	2008	dSB2	17809	93.3	98.3	5.7	6.5	-5.0	4.6	0.72
85	2009	dSB2	19916	93.2	97.8	5.5	5.9	-4.6	4.1	0.74
86	2010	dSB2	18402	93.8	97.7	6.0	6.1	-3.9	4.1	0.77
87	2011	dSB2	18189	93.9	97.5	5.6	6.0	-3.6	4.0	0.76
88	2012	dSB2	18640	94.7	97.9	5.2	5.5	-3.2	3.6	0.77
89	2013	dSB2	18646	94.7	97.7	5.4	5.4	-3.0	3.4	0.80
90	2014	dSB2	17799	94.8	97.5	5.0	5.4	-2.7	3.6	0.76
91	2015	dSB2	17594	95.9	98.0	5.4	5.4	-2.1	3.3	0.81
92	2016	dSB2	16353	95.4	97.3	4.9	5.2	-1.9	3.4	0.77
93	2017	dSB2	14780	95.4	96.9	5.2	5.7	-1.6	3.8	0.76
94	2018	dSB2	16365	96.8	97.8	4.6	4.9	-1.1	3.1	0.79
95	2019	dSB2	15565	97.1	97.8	6.1	5.9	-0.7	3.2	0.86
96	2020	dSB2	15549	98.4	98.7	6.0	5.8	-0.2	3.2	0.85
97	2021	dSB2	15568	99.8	99.6	6.3	6.1	0.2	3.2	0.86
98	2022	dSB2	15054	99.8	99.5	6.8	6.5	0.3	3.3	0.88
99	2023	dSB2	13574	100.5	99.8	6.9	6.4	0.6	3.1	0.89
100	2024	dSB2	2930	101.7	100.9	7.0	6.6	0.8	3.0	0.90
101	2000	dCE2	16926	98.8	108.1	7.5	9.2	-9.3	6.9	0.68
102	2001	dCE2	16834	97.5	106.1	7.3	8.6	-8.6	6.0	0.72
103	2002	dCE2	16820	98.2	106.1	5.8	7.3	-7.9	5.6	0.65
104	2003	dCE2	16435	97.5	104.9	6.2	7.6	-7.4	5.5	0.70
105	2004	dCE2	15329	97.9	104.3	6.4	7.3	-6.5	4.9	0.75
106	2005	dCE2	14918	98.2	103.9	6.0	6.9	-5.8	4.7	0.75
107	2006	dCE2	15402	98.5	103.9	5.6	6.5	-5.4	4.2	0.77
108	2007	dCE2	15253	98.0	103.0	5.3	6.3	-5.0	4.2	0.75
109	2008	dCE2	16424	97.5	102.1	5.4	6.2	-4.6	4.1	0.76
110	2009	dCE2	18604	97.6	101.8	5.5	5.9	-4.2	3.5	0.81
111	2010	dCE2	17221	98.5	102.0	6.3	6.3	-3.5	3.3	0.86

JER datacut EBV (me) and official EBV (e) for nongenotyped females with phenotype

Obs	BYR	name	no	mean_me	mean_e	std_me	std_e	mean_dif	std_dif	corr
112	2011	dCE2	16939	98.8	101.9	5.1	5.4	-3.1	3.1	0.83
113	2012	dCE2	17467	98.4	101.3	5.6	5.6	-2.9	3.0	0.85
114	2013	dCE2	17445	99.3	101.9	5.4	5.4	-2.6	2.8	0.86
115	2014	dCE2	16930	99.4	101.6	5.3	5.3	-2.2	2.9	0.86
116	2015	dCE2	16610	98.3	100.2	5.1	5.1	-1.9	2.6	0.87
117	2016	dCE2	15528	99.5	100.9	5.0	5.1	-1.4	2.8	0.85
118	2017	dCE2	13900	99.6	100.7	5.4	5.7	-1.0	3.2	0.83
119	2018	dCE2	14942	98.9	99.8	4.6	4.6	-0.9	2.4	0.86
120	2019	dCE2	14276	99.0	99.6	5.6	5.4	-0.6	2.5	0.90
121	2020	dCE2	14457	100.6	100.7	5.4	5.3	-0.1	2.5	0.89
122	2021	dCE2	14306	99.8	99.8	5.6	5.5	0.0	2.7	0.89
123	2022	dCE2	13783	99.8	99.6	5.6	5.4	0.2	2.7	0.88
124	2023	dCE2	12470	100.6	100.0	5.4	5.2	0.6	2.6	0.88
125	2024	dCE2	2687	101.2	100.6	5.1	4.9	0.6	2.3	0.89
126	2000	dCS2	15270	93.8	92.4	6.3	6.9	1.4	2.4	0.94
127	2001	dCS2	14904	95.4	94.2	6.2	6.7	1.2	2.3	0.94
128	2002	dCS2	14776	95.4	94.3	7.0	7.4	1.1	2.2	0.96
129	2003	dCS2	14154	96.3	95.3	6.4	6.7	1.0	1.8	0.96
130	2004	dCS2	13123	96.2	95.4	6.7	6.9	0.9	1.5	0.97
131	2005	dCS2	12542	95.5	94.7	6.6	6.8	0.8	1.3	0.98
132	2006	dCS2	12570	95.5	94.7	6.5	6.6	0.8	1.1	0.99
133	2007	dCS2	12030	97.8	97.2	6.3	6.4	0.6	1.0	0.99
134	2008	dCS2	14765	98.3	97.7	6.4	6.4	0.6	0.8	0.99
135	2009	dCS2	16875	98.3	97.7	6.0	6.1	0.5	0.7	0.99
136	2010	dCS2	15385	97.1	96.6	5.9	5.9	0.5	0.7	0.99
137	2011	dCS2	15060	97.1	96.6	5.9	5.9	0.4	0.6	0.99
138	2012	dCS2	15593	97.4	97.0	5.8	5.9	0.4	0.6	1.00
139	2013	dCS2	15375	97.2	96.8	5.3	5.3	0.3	0.5	0.99
140	2014	dCS2	15450	96.7	96.4	5.7	5.8	0.3	0.5	1.00
141	2015	dCS2	15705	98.4	98.2	6.2	6.2	0.3	0.5	1.00
142	2016	dCS2	14842	97.6	97.4	5.5	5.5	0.2	0.5	1.00
143	2017	dCS2	13314	98.0	97.9	5.3	5.3	0.1	0.5	1.00
144	2018	dCS2	14345	98.4	98.3	4.7	4.7	0.1	0.4	1.00
145	2019	dCS2	13871	99.3	99.3	4.6	4.6	0.1	0.5	1.00
146	2020	dCS2	14035	99.1	99.1	4.6	4.6	0.0	0.5	0.99
147	2021	dCS2	13795	99.8	99.9	4.3	4.3	0.0	0.5	0.99
148	2022	dCS2	13368	100.4	100.5	4.1	4.1	0.0	0.4	0.99

JER datacut EBV (me) and official EBV (e) for nongenotyped females with phenotype

Obs	BYR	name	no	mean_me	mean_e	std_me	std_e	mean_dif	std_dif	corr
149	2023	dCS2	12134	99.9	100.0	4.2	4.2	0.0	0.4	0.99
150	2024	dCS2	2598	100.0	100.0	4.1	4.1	0.0	0.4	0.99
151	2000	mSB1	20236	91.3	90.2	6.6	7.5	1.1	3.2	0.90
152	2001	mSB1	18992	91.6	90.6	5.6	6.5	1.0	2.8	0.90
153	2002	mSB1	19203	90.7	89.6	6.2	6.8	1.1	2.7	0.92
154	2003	mSB1	18761	91.1	90.0	6.5	7.0	1.1	2.4	0.94
155	2004	mSB1	18886	91.2	90.4	6.6	7.0	0.8	2.2	0.95
156	2005	mSB1	18575	91.5	90.9	5.9	6.4	0.6	2.1	0.94
157	2006	mSB1	19872	90.3	89.7	6.9	7.2	0.6	1.9	0.96
158	2007	mSB1	19917	90.6	90.1	5.8	6.1	0.4	1.8	0.96
159	2008	mSB1	21116	90.0	89.7	6.2	6.5	0.4	1.8	0.96
160	2009	mSB1	22966	90.3	90.1	6.1	6.3	0.3	1.6	0.97
161	2010	mSB1	19572	92.1	92.0	5.6	5.9	0.2	1.6	0.96
162	2011	mSB1	18841	92.6	92.5	5.8	6.1	0.1	1.6	0.97
163	2012	mSB1	18743	93.6	93.6	6.1	6.3	0.0	1.5	0.97
164	2013	mSB1	16684	93.3	93.3	5.8	6.1	-0.1	1.6	0.96
165	2014	mSB1	17212	93.6	93.7	5.9	6.2	-0.1	1.6	0.96
166	2015	mSB1	16316	96.4	96.4	6.3	6.4	-0.1	1.4	0.98
167	2016	mSB1	15335	95.8	95.9	6.3	6.5	-0.1	1.5	0.97
168	2017	mSB1	14281	97.0	97.1	6.2	6.3	-0.1	1.6	0.97
169	2018	mSB1	15344	99.2	99.3	5.3	5.4	-0.1	1.6	0.96
170	2019	mSB1	14564	98.8	98.9	5.3	5.5	-0.2	1.6	0.95
171	2020	mSB1	13718	99.7	99.8	6.2	6.3	-0.2	1.6	0.97
172	2021	mSB1	12906	99.7	99.8	6.1	6.3	-0.1	1.7	0.96
173	2022	mSB1	3189	101.3	101.4	5.0	5.3	-0.2	1.6	0.95
174	2000	mCE1	18212	94.0	92.8	6.1	6.7	1.2	3.4	0.86
175	2001	mCE1	17029	93.6	92.6	5.9	6.3	1.0	2.9	0.89
176	2002	mCE1	17041	93.7	92.6	6.4	6.8	1.0	2.6	0.92
177	2003	mCE1	16841	94.0	92.9	6.2	6.5	1.1	2.4	0.93
178	2004	mCE1	17055	93.1	92.4	6.4	6.6	0.7	2.1	0.95
179	2005	mCE1	17108	91.8	91.3	7.3	7.5	0.4	2.1	0.96
180	2006	mCE1	18236	91.9	91.5	6.8	6.9	0.4	1.8	0.96
181	2007	mCE1	18523	92.1	91.9	6.4	6.5	0.3	1.7	0.97
182	2008	mCE1	19792	92.6	92.4	6.3	6.4	0.2	1.7	0.96
183	2009	mCE1	21658	93.6	93.5	5.9	6.0	0.2	1.5	0.97
184	2010	mCE1	18429	94.0	94.0	5.8	5.9	0.0	1.4	0.97
185	2011	mCE1	17590	95.4	95.4	5.5	5.6	0.0	1.5	0.97

JER datacut EBV (me) and official EBV (e) for nongenotyped females with phenotype

Obs	BYR	name	no	mean_me	mean_e	std_me	std_e	mean_dif	std_dif	corr
186	2012	mCE1	17759	95.5	95.5	5.7	5.8	0.0	1.4	0.97
187	2013	mCE1	15822	95.2	95.3	5.5	5.6	-0.1	1.3	0.97
188	2014	mCE1	16349	96.5	96.6	5.6	5.6	-0.1	1.2	0.98
189	2015	mCE1	15488	98.0	98.1	5.8	5.8	-0.1	1.2	0.98
190	2016	mCE1	14302	97.2	97.2	5.9	5.9	-0.1	1.2	0.98
191	2017	mCE1	13241	99.5	99.6	5.7	5.7	-0.1	1.4	0.97
192	2018	mCE1	14254	99.8	99.9	4.9	5.0	-0.1	1.4	0.96
193	2019	mCE1	13598	100.0	100.2	4.9	5.0	-0.2	1.5	0.95
194	2020	mCE1	12787	100.0	100.1	4.9	5.0	-0.1	1.5	0.95
195	2021	mCE1	11815	99.8	99.9	4.5	4.6	-0.1	1.6	0.94
196	2022	mCE1	2921	101.1	101.2	4.3	4.6	-0.1	1.6	0.94
197	2000	mCS1	15637	98.6	98.2	5.9	6.5	0.5	2.6	0.92
198	2001	mCS1	14536	98.0	97.4	6.6	6.9	0.6	2.3	0.94
199	2002	mCS1	14302	98.0	97.4	6.8	7.1	0.6	2.0	0.96
200	2003	mCS1	13870	98.3	97.6	6.0	6.2	0.7	1.8	0.96
201	2004	mCS1	13503	98.4	97.9	6.5	6.7	0.5	1.5	0.97
202	2005	mCS1	13204	99.3	98.7	6.1	6.2	0.6	1.3	0.98
203	2006	mCS1	15942	98.9	98.4	6.1	6.1	0.6	1.1	0.98
204	2007	mCS1	16111	99.4	98.8	6.1	6.1	0.6	1.0	0.99
205	2008	mCS1	16843	97.8	97.2	6.8	6.9	0.6	0.9	0.99
206	2009	mCS1	18441	96.9	96.3	6.6	6.6	0.6	0.8	0.99
207	2010	mCS1	15485	98.4	97.8	5.4	5.4	0.6	0.8	0.99
208	2011	mCS1	14633	97.9	97.4	5.2	5.2	0.5	0.7	0.99
209	2012	mCS1	15331	97.9	97.4	4.9	4.9	0.5	0.7	0.99
210	2013	mCS1	14409	97.9	97.4	4.7	4.6	0.5	0.6	0.99
211	2014	mCS1	15237	97.2	96.8	5.0	4.9	0.5	0.6	0.99
212	2015	mCS1	14270	97.7	97.3	4.7	4.7	0.4	0.5	0.99
213	2016	mCS1	13453	98.0	97.6	4.8	4.7	0.4	0.5	0.99
214	2017	mCS1	12639	98.1	97.8	4.8	4.8	0.3	0.5	0.99
215	2018	mCS1	13716	97.7	97.4	4.8	4.8	0.2	0.5	1.00
216	2019	mCS1	13126	98.1	98.0	4.3	4.3	0.1	0.5	0.99
217	2020	mCS1	12439	99.8	99.8	5.1	5.1	0.0	0.4	1.00
218	2021	mCS1	11518	99.3	99.3	5.0	5.0	-0.1	0.5	1.00
219	2022	mCS1	2846	98.9	99.1	4.1	4.0	-0.1	0.5	0.99
220	2000	mSB2	15859	94.7	91.5	6.9	9.1	3.3	5.3	0.82
221	2001	mSB2	14772	95.2	92.0	7.2	9.0	3.2	4.9	0.84
222	2002	mSB2	15187	95.7	92.7	7.1	8.9	3.0	4.9	0.84

JER datacut EBV (me) and official EBV (e) for nongenotyped females with phenotype

Obs	BYR	name	no	mean_me	mean_e	std_me	std_e	mean_dif	std_dif	corr
223	2003	mSB2	15456	96.7	93.9	7.1	8.7	2.9	4.5	0.86
224	2004	mSB2	15902	96.7	94.2	7.0	8.7	2.5	4.3	0.87
225	2005	mSB2	16456	96.7	94.6	7.2	8.6	2.1	4.4	0.86
226	2006	mSB2	17411	95.4	93.6	7.5	8.7	1.9	3.9	0.89
227	2007	mSB2	17156	96.4	94.7	6.4	7.8	1.7	3.9	0.87
228	2008	mSB2	17783	96.6	95.0	6.2	7.6	1.6	3.7	0.87
229	2009	mSB2	19100	97.0	95.8	5.7	7.1	1.3	3.6	0.86
230	2010	mSB2	15852	97.1	96.2	6.0	7.3	0.9	3.6	0.87
231	2011	mSB2	15399	98.0	97.3	5.5	7.1	0.7	3.7	0.86
232	2012	mSB2	15046	98.0	97.5	5.6	7.0	0.5	3.6	0.86
233	2013	mSB2	13435	98.4	98.0	5.4	6.9	0.4	3.7	0.84
234	2014	mSB2	13802	98.2	97.9	5.8	6.9	0.3	3.5	0.86
235	2015	mSB2	13731	99.1	98.9	5.6	6.5	0.2	3.1	0.88
236	2016	mSB2	12358	99.2	99.1	6.3	7.1	0.1	3.2	0.90
237	2017	mSB2	10815	98.6	98.8	6.2	7.0	-0.1	3.2	0.89
238	2018	mSB2	10480	100.6	100.7	6.0	6.6	-0.1	3.2	0.88
239	2019	mSB2	7783	100.4	100.5	5.8	6.4	-0.2	3.3	0.86
240	2020	mSB2	6627	100.1	100.5	7.4	7.7	-0.4	3.3	0.90
241	2021	mSB2	1395	99.1	99.5	8.0	8.1	-0.4	2.9	0.93
242	2022	mSB2	1	.	.	.	.	.	.	.
243	2000	mCE2	14620	97.3	94.2	6.0	7.3	3.1	4.2	0.82
244	2001	mCE2	13411	96.7	93.8	6.7	7.6	2.9	3.9	0.86
245	2002	mCE2	13951	97.8	95.1	6.3	7.1	2.7	3.8	0.85
246	2003	mCE2	14372	98.0	95.5	6.0	6.8	2.6	3.4	0.87
247	2004	mCE2	14853	97.8	95.7	6.0	6.7	2.1	3.2	0.88
248	2005	mCE2	15557	97.0	95.3	6.5	7.1	1.7	3.1	0.90
249	2006	mCE2	16577	97.1	95.4	6.4	6.8	1.6	2.7	0.92
250	2007	mCE2	16325	97.5	96.1	6.2	6.6	1.4	2.6	0.92
251	2008	mCE2	17008	98.3	97.0	5.9	6.3	1.3	2.5	0.91
252	2009	mCE2	18254	99.2	98.0	5.7	6.0	1.2	2.4	0.92
253	2010	mCE2	15156	99.1	98.1	5.8	6.1	1.0	2.2	0.93
254	2011	mCE2	14647	100.2	99.3	5.5	5.8	0.9	2.1	0.93
255	2012	mCE2	14404	100.3	99.6	5.4	5.7	0.8	2.1	0.93
256	2013	mCE2	12894	100.3	99.6	5.3	5.5	0.7	2.0	0.93
257	2014	mCE2	13134	100.8	100.2	5.4	5.5	0.6	1.9	0.94
258	2015	mCE2	13010	101.8	101.4	5.2	5.3	0.5	2.0	0.93
259	2016	mCE2	11765	101.7	101.3	5.4	5.5	0.4	2.0	0.93

JER datacut EBV (me) and official EBV (e) for nongenotyped females with phenotype

Obs	BYR	name	no	mean_me	mean_e	std_me	std_e	mean_dif	std_dif	corr
260	2017	mCE2	10216	102.6	102.3	5.4	5.5	0.3	2.0	0.93
261	2018	mCE2	9783	102.8	102.7	5.1	5.3	0.1	2.2	0.91
262	2019	mCE2	7229	101.4	101.5	5.5	5.6	-0.1	2.4	0.91
263	2020	mCE2	6213	100.7	101.0	6.5	6.6	-0.3	2.6	0.92
264	2021	mCE2	1321	99.0	99.2	6.1	6.3	-0.2	2.4	0.92
265	2022	mCE2	1	.	.	.	.	.	.	.
266	2000	mCS2	12916	97.2	94.5	6.2	6.3	2.7	2.5	0.92
267	2001	mCS2	11844	95.7	93.1	6.4	6.4	2.6	2.3	0.94
268	2002	mCS2	12167	96.2	93.6	6.9	6.9	2.6	2.1	0.96
269	2003	mCS2	12583	95.5	92.9	6.5	6.4	2.6	1.8	0.96
270	2004	mCS2	13219	96.4	93.9	7.2	7.1	2.5	1.6	0.98
271	2005	mCS2	14157	97.1	94.6	6.3	6.2	2.5	1.4	0.98
272	2006	mCS2	15034	96.6	94.2	6.4	6.3	2.4	1.2	0.98
273	2007	mCS2	14603	97.1	94.8	6.1	5.9	2.4	1.1	0.98
274	2008	mCS2	15123	96.2	93.9	6.3	6.1	2.2	1.0	0.99
275	2009	mCS2	16454	95.7	93.6	6.2	6.0	2.1	0.9	0.99
276	2010	mCS2	13541	96.5	94.5	5.5	5.4	2.0	0.8	0.99
277	2011	mCS2	13358	95.7	93.9	5.3	5.1	1.8	0.8	0.99
278	2012	mCS2	13318	95.6	94.0	5.0	4.8	1.7	0.7	0.99
279	2013	mCS2	12054	95.6	94.1	4.7	4.5	1.6	0.7	0.99
280	2014	mCS2	12416	95.9	94.4	5.1	5.0	1.5	0.6	0.99
281	2015	mCS2	12166	96.0	94.8	5.0	4.8	1.2	0.6	0.99
282	2016	mCS2	11237	96.7	95.7	4.6	4.4	1.0	0.6	0.99
283	2017	mCS2	9690	97.1	96.3	4.8	4.6	0.8	0.6	0.99
284	2018	mCS2	9390	96.7	96.2	5.0	4.9	0.5	0.6	0.99
285	2019	mCS2	6979	97.9	97.6	4.6	4.5	0.3	0.6	0.99
286	2020	mCS2	6024	99.7	99.8	5.3	5.2	0.0	0.6	0.99
287	2021	mCS2	1281	100.3	100.6	5.6	5.6	-0.3	0.5	1.00
288	2022	mCS2	1	.	.	.	.	.	.	.
289	2000	brth	10572	94.9	103.3	7.6	8.1	-8.4	5.6	0.75
290	2001	brth	10925	95.6	103.6	7.2	7.7	-8.0	4.9	0.78
291	2002	brth	10321	95.2	102.7	6.3	7.1	-7.5	4.7	0.76
292	2003	brth	9805	95.6	102.5	6.1	6.7	-7.0	4.1	0.79
293	2004	brth	9796	95.0	101.2	6.0	7.0	-6.2	4.4	0.78
294	2005	brth	9545	93.9	99.5	5.9	6.4	-5.6	3.7	0.82
295	2006	brth	9674	94.0	99.1	6.2	6.6	-5.1	3.8	0.82
296	2007	brth	9525	93.6	98.3	5.5	5.9	-4.6	3.5	0.81

JER datacut EBV (me) and official EBV (e) for nongenotyped females with phenotype

Obs	BYR	name	no	mean_me	mean_e	std_me	std_e	mean_dif	std_dif	corr
297	2008	brth	10285	93.2	97.5	5.4	6.0	-4.3	3.6	0.81
298	2009	brth	11170	93.3	97.2	5.2	5.4	-3.9	3.0	0.84
299	2010	brth	10724	94.3	97.8	5.9	5.8	-3.4	2.9	0.88
300	2011	brth	10826	94.4	97.5	5.6	5.5	-3.0	2.9	0.87
301	2012	brth	10427	96.3	98.9	5.5	5.5	-2.5	2.9	0.86
302	2013	brth	10462	96.3	98.7	5.4	6.0	-2.3	3.8	0.78
303	2014	brth	10625	96.7	98.8	5.2	5.7	-2.1	3.2	0.83
304	2015	brth	9680	96.9	98.5	5.3	5.6	-1.5	3.0	0.85
305	2016	brth	9920	97.4	98.7	5.3	5.4	-1.4	2.7	0.87
306	2017	brth	9072	96.9	97.9	5.2	5.5	-1.0	2.9	0.85
307	2018	brth	9352	97.7	98.3	4.7	5.0	-0.6	2.7	0.85
308	2019	brth	9620	97.6	97.9	6.1	6.0	-0.3	2.6	0.91
309	2020	brth	11984	98.7	98.7	6.0	5.8	0.0	2.5	0.91
310	2021	brth	12606	100.8	100.2	6.2	6.1	0.5	2.6	0.91
311	2022	brth	14357	100.9	100.2	6.1	5.8	0.7	2.6	0.91
312	2023	brth	14194	101.9	100.9	6.3	6.0	1.0	2.7	0.91
313	2024	brth	3445	103.6	102.5	6.4	5.9	1.1	2.2	0.94
314	2000	calv	20236	92.0	89.4	6.4	8.0	2.6	4.5	0.83
315	2001	calv	18992	92.3	89.8	6.0	7.4	2.5	3.9	0.85
316	2002	calv	19203	92.1	89.7	6.4	7.6	2.4	3.8	0.87
317	2003	calv	18761	92.8	90.5	6.6	7.6	2.4	3.4	0.89
318	2004	calv	18886	92.8	90.7	6.5	7.5	2.0	3.2	0.90
319	2005	calv	18575	92.7	90.9	6.7	7.6	1.8	3.2	0.91
320	2006	calv	19872	91.5	90.0	7.3	7.9	1.6	2.9	0.93
321	2007	calv	19917	92.1	90.8	6.0	6.8	1.4	2.8	0.91
322	2008	calv	21116	92.1	90.9	6.0	6.8	1.2	2.8	0.91
323	2009	calv	22966	92.7	91.7	5.8	6.5	0.9	2.6	0.92
324	2010	calv	19572	93.7	93.0	5.8	6.6	0.7	2.6	0.92
325	2011	calv	18841	94.6	94.1	5.6	6.4	0.5	2.6	0.91
326	2012	calv	18743	95.2	94.8	5.8	6.5	0.4	2.5	0.92
327	2013	calv	16684	95.1	94.9	5.4	6.3	0.3	2.7	0.91
328	2014	calv	17212	95.4	95.3	5.6	6.4	0.1	2.7	0.91
329	2015	calv	16316	97.7	97.6	5.9	6.3	0.1	2.3	0.93
330	2016	calv	15335	97.2	97.2	6.3	6.7	0.0	2.4	0.94
331	2017	calv	14281	98.1	98.4	6.0	6.4	-0.3	2.5	0.92
332	2018	calv	15344	100.2	100.4	5.4	5.9	-0.2	2.5	0.90
333	2019	calv	14564	99.7	99.9	5.3	5.8	-0.2	2.6	0.89

JER datacut EBV (me) and official EBV (e) for nongenotyped females with phenotype

Obs	BYR	name	no	mean_me	mean_e	std_me	std_e	mean_dif	std_dif	corr
334	2020	calv	13718	100.0	100.3	6.4	6.7	-0.3	2.6	0.92
335	2021	calv	12906	100.1	100.2	6.1	6.4	-0.1	2.7	0.91
336	2022	calv	3189	101.7	101.9	4.9	5.6	-0.2	2.7	0.88

JER datacut EBV (me) and official EBV (e) for nongenotyped females with phenotype

Obs	diff	d_brth	d_calv	p_brth	p_calv
1	-131	.	.	.	.
2	-98	.	.	.	.
3	-83	.	.	.	.
4	-82	.	.	.	.
5	-79	.	.	.	.
6	-78	.	.	.	.
7	-77	.	1	.	0
8	-76	.	1	.	0
9	-74	.	1	.	0
10	-73	.	1	.	0
11	-72	.	1	.	0
12	-71	.	.	.	.
13	-70	.	1	.	0
14	-69	.	1	.	0
15	-68	.	3	.	0
16	-67	.	1	.	0
17	-66	.	4	.	0
18	-65	.	.	.	.
19	-64	.	.	.	.
20	-63	.	2	.	0
21	-62	.	1	.	0
22	-61	.	3	.	0
23	-60	.	2	.	0
24	-59	.	3	.	0
25	-57	.	.	.	.
26	-56	.	2	.	0
27	-55	.	1	.	0
28	-54	.	3	.	0
29	-53	.	1	.	0
30	-52	.	2	.	0
31	-51	.	1	.	0
32	-50	.	1	.	0
33	-49	.	2	.	0
34	-48	.	.	.	.
35	-47	.	1	.	0
36	-46	.	.	.	.
37	-45	.	2	.	0

JER datacut EBV (me) and official EBV (e) for nongenotyped females with phenotype

Obs	diff	d_brth	d_calv	p_brth	p_calv
38	-44	.	3	.	0
39	-43	.	3	.	0
40	-42	.	1	.	0
41	-41	.	1	.	0
42	-40	.	1	.	0
43	-39	.	2	.	0
44	-38	.	7	.	0
45	-37	.	7	.	0
46	-36	.	9	.	0
47	-35	.	16	.	0
48	-34	.	25	.	0
49	-33	1	31	0	0
50	-32	.	28	.	0
51	-31	.	32	.	0
52	-30	2	45	0	0
53	-29	.	26	.	0
54	-28	4	18	0	0
55	-27	6	12	0	0
56	-26	12	26	0	0
57	-25	15	19	0	0
58	-24	26	24	0	0
59	-23	31	14	0	0
60	-22	48	20	0	0
61	-21	61	29	0	0
62	-20	65	36	0	0
63	-19	68	91	0	0
64	-18	96	245	0	0
65	-17	162	427	0	0
66	-16	299	699	0	0
67	-15	537	847	0	0
68	-14	863	854	0	0
69	-13	1530	741	1	0
70	-12	2380	587	1	0
71	-11	3720	586	1	0
72	-10	5562	648	2	0
73	-9	7767	1023	3	0
74	-8	10112	1504	4	0

JER datacut EBV (me) and official EBV (e) for nongenotyped females with phenotype

Obs	diff	d_brth	d_calv	p_brth	p_calv
75	-7	13206	1866	5	0
76	-6	17028	2091	7	1
77	-5	21220	2978	8	1
78	-4	23733	4026	9	1
79	-3	27338	5410	11	1
80	-2	29906	9256	12	2
81	-1	28517	24624	11	6
82	0	26484	70933	10	18
83	1	18097	101716	7	26
84	2	7942	72075	3	18
85	3	3124	42417	1	11
86	4	1774	24134	1	6
87	5	1189	12721	0	3
88	6	878	6353	0	2
89	7	750	3038	0	1
90	8	579	1495	0	0
91	9	553	707	0	0
92	10	522	350	0	0
93	11	512	170	0	0
94	12	512	79	0	0
95	13	384	30	0	0
96	14	255	15	0	0
97	15	174	5	0	0
98	16	101	4	0	0
99	17	79	4	0	0
100	18	61	2	0	0
101	19	61	1	0	0
102	20	51	.	0	.
103	21	56	.	0	.
104	22	55	.	0	.
105	23	61	.	0	.
106	24	39	.	0	.
107	25	42	.	0	.
108	26	30	.	0	.
109	27	26	.	0	.
110	28	16	.	0	.
111	29	16	.	0	.

JER datacut EBV (me) and official EBV (e) for nongenotyped females with phenotype

Obs	diff	d_brth	d_calv	p_brth	p_calv
112	30	11	.	0	.
113	31	10	.	0	.
114	32	2	.	0	.
115	33	3	.	0	.
116	34	5	.	0	.
117	35	1	.	0	.
118	36	1	.	0	.
119	37	5	.	0	.
120	38	5	.	0	.
121	39	4	.	0	.
122	40	.	.	.	.
123	41	2	.	0	.
124	42	.	.	.	.
125	43	2	.	0	.
126	44	2	.	0	.
127	45	3	.	0	.
128	46	2	.	0	.
129	47	4	.	0	.
130	48	5	.	0	.
131	49	2	.	0	.
132	50	6	.	0	.
133	51	9	.	0	.
134	52	15	.	0	.
135	53	16	.	0	.
136	54	10	.	0	.
137	55	8	.	0	.
138	56	7	.	0	.
139	57	6	.	0	.
140	58	2	.	0	.
141	59	2	.	0	.
142	60	1	.	0	.
143	61	1	.	0	.
144	62	.	.	.	.
145	63	.	.	.	.
146	64	.	.	.	.
147	65	.	.	.	.
148	66	.	.	.	.

JER datacut EBV (me) and official EBV (e) for nongenotyped females with phenotype

Obs	diff	d_brth	d_calv	p_brth	p_calv
149	67	.	.	.	.
150	68	.	.	.	.
151	70	.	.	.	.
152	71	1	.	0	.
153	72	.	.	.	.
154	73	1	.	0	.
155	74	.	.	.	.
156	77	1	.	0	.
157	78	1	.	0	.
158	79	.	.	.	.
159	82	1	.	0	.
160	83	.	.	.	.
161	84	1	.	0	.
162	85	.	.	.	.
163	87	.	.	.	.
164	88	.	.	.	.
165	89	.	.	.	.
166	91	1	.	0	.
167	92	.	.	.	.
168	93	.	.	.	.
169	95	.	.	.	.
170	98	.	.	.	.
171	99	.	.	.	.
172	100	1	.	0	.
173	101	.	.	.	.
174	103	1	.	0	.
175	104	.	.	.	.
176	105	1	.	0	.
177	106	1	.	0	.
178	107	3	.	0	.
179	108	2	.	0	.
180	109	.	.	.	.
181	110	.	.	.	.
182	111	.	.	.	.
183	112	2	.	0	.
184	113	1	.	0	.
185	114	1	.	0	.

JER datacut EBV (me) and official EBV (e) for nongenotyped females with phenotype

Obs	diff	d_brth	d_calv	p_brth	p_calv
186	115	1	.	0	.
187	116	.	.	.	.
188	117	1	.	0	.
189	118	.	.	.	.
190	119	.	.	.	.
191	120	.	.	.	.
192	121	.	.	.	.
193	122	.	.	.	.
194	123	.	.	.	.
195	125	.	.	.	.
196	126	.	.	.	.
197	127	.	.	.	.
198	128	.	.	.	.
199	129	.	.	.	.
200	130	.	.	.	.
201	131	.	.	.	.
202	133	.	.	.	.
203	136	.	.	.	.
204	141	.	.	.	.

JER datacut EBV (me) and official EBV (e) for nongenotyped females with phenotype

Obs	diff	d_dSB1	d_dCE1	d_dCS1	d_dSB2	d_dCE2	d_dCS2
1	-131	.	.	.	.	.	.
2	-98	.	.	.	.	.	.
3	-83	.	.	.	.	.	.
4	-82	.	.	.	.	.	.
5	-79	.	.	.	.	.	.
6	-78	.	.	.	.	.	.
7	-77	.	.	.	.	.	.
8	-76	.	.	.	.	.	.
9	-74	.	.	.	.	.	.
10	-73	.	.	.	.	.	.
11	-72	.	.	.	.	.	.
12	-71	.	.	.	.	.	.
13	-70	.	.	.	.	.	.
14	-69	.	.	.	.	.	.
15	-68	.	.	.	.	.	.
16	-67	.	.	.	.	.	.
17	-66	.	.	.	.	.	.
18	-65	.	.	.	.	.	.
19	-64	.	.	.	.	.	.
20	-63	.	.	.	.	.	.
21	-62	.	.	.	.	.	.
22	-61	.	.	.	.	.	.
23	-60	.	.	.	.	.	.
24	-59	.	.	.	.	.	.
25	-57	.	.	.	.	.	.
26	-56	.	.	.	.	.	.
27	-55	.	.	.	.	.	.
28	-54	.	.	.	.	.	.
29	-53	.	.	.	.	.	.
30	-52	.	.	.	.	.	.
31	-51	.	.	.	.	.	.
32	-50	.	.	.	.	.	.
33	-49	.	.	.	.	.	.
34	-48	.	.	.	.	.	.
35	-47	.	.	.	.	.	.
36	-46	.	.	.	.	.	.
37	-45	.	.	.	.	.	.

JER datacut EBV (me) and official EBV (e) for nongenotyped females with phenotype

Obs	diff	d_dSB1	d_dCE1	d_dCS1	d_dSB2	d_dCE2	d_dCS2
38	-44	.	.	.	.	.	.
39	-43	.	.	.	.	.	.
40	-42	.	.	.	.	.	.
41	-41	.	.	.	.	.	.
42	-40	.	.	.	.	.	.
43	-39	.	.	.	.	.	.
44	-38	.	.	.	.	.	.
45	-37	.	.	.	1	.	.
46	-36	.	.	.	.	.	.
47	-35	.	.	.	2	1	.
48	-34	.	.	.	3	.	.
49	-33	.	.	.	5	1	.
50	-32	.	.	.	5	4	.
51	-31	.	.	.	8	.	.
52	-30	.	.	.	3	2	.
53	-29	.	.	.	4	5	.
54	-28	.	.	.	16	8	.
55	-27	1	.	.	11	14	.
56	-26	.	.	.	18	19	.
57	-25	.	.	.	41	26	.
58	-24	1	.	.	63	57	.
59	-23	2	2	.	70	65	.
60	-22	1	8	.	89	86	.
61	-21	7	8	.	135	151	.
62	-20	2	3	.	179	249	.
63	-19	21	15	.	291	421	.
64	-18	49	23	.	522	673	.
65	-17	57	45	.	916	1016	.
66	-16	94	67	.	1550	1496	.
67	-15	99	155	.	2344	2155	.
68	-14	135	251	.	3582	3166	.
69	-13	204	465	.	5176	4239	.
70	-12	390	873	.	6962	5758	.
71	-11	719	1388	1	9449	7758	1
72	-10	1304	2349	1	12355	9719	4
73	-9	2314	3693	2	16101	12410	6
74	-8	4041	5322	5	20525	15745	15

JER datacut EBV (me) and official EBV (e) for nongenotyped females with phenotype

Obs	diff	d_dSB1	d_dCE1	d_dCS1	d_dSB2	d_dCE2	d_dCS2
75	-7	6806	7578	22	26512	20090	26
76	-6	10432	10452	47	32288	25267	79
77	-5	14849	14619	119	37823	31008	235
78	-4	21758	20975	405	42618	36836	673
79	-3	30241	26831	1143	45787	42991	1813
80	-2	38830	33200	3634	41800	45786	5008
81	-1	49329	39475	28307	34334	42962	23489
82	0	50361	44243	145566	25900	31210	185893
83	1	16600	17602	27659	15398	15422	83937
84	2	2852	2121	6919	7559	6894	24352
85	3	1580	1350	2250	4807	3902	10675
86	4	1249	966	856	3642	2846	4987
87	5	877	898	395	3106	2169	2546
88	6	737	651	127	2661	1637	1236
89	7	839	564	65	2088	1297	545
90	8	709	613	21	1624	955	222
91	9	424	627	7	1221	885	74
92	10	242	465	1	992	853	34
93	11	140	272	.	1021	790	20
94	12	83	158	.	922	673	7
95	13	83	94	1	877	510	1
96	14	73	66	.	769	322	1
97	15	70	60	.	501	197	.
98	16	54	50	.	329	102	.
99	17	37	68	.	218	80	.
100	18	21	65	.	111	66	.
101	19	29	51	.	94	42	.
102	20	13	37	.	68	44	.
103	21	7	29	.	73	60	.
104	22	1	25	.	77	61	.
105	23	5	13	.	58	66	.
106	24	6	17	.	67	58	.
107	25	6	6	.	70	60	.
108	26	4	1	.	65	57	.
109	27	1	1	.	82	55	.
110	28	6	3	.	69	34	.
111	29	2	.	.	55	31	.

JER datacut EBV (me) and official EBV (e) for nongenotyped females with phenotype

Obs	diff	d_dSB1	d_dCE1	d_dCS1	d_dSB2	d_dCE2	d_dCS2
112	30	6	2	.	43	26	.
113	31	7	3	.	43	24	.
114	32	12	6	.	26	20	.
115	33	24	1	.	20	6	.
116	34	13	1	.	19	13	.
117	35	9	.	.	9	6	.
118	36	10	5	.	9	5	.
119	37	5	3	.	14	8	.
120	38	6	2	.	7	6	.
121	39	1	4	.	8	7	.
122	40	.	2	.	5	6	.
123	41	.	10	.	12	7	.
124	42	.	14	.	11	8	.
125	43	1	11	.	7	1	.
126	44	.	10	.	10	10	.
127	45	1	9	.	6	3	.
128	46	.	6	.	3	6	.
129	47	.	3	.	2	5	.
130	48	.	.	.	9	.	.
131	49	1	.	.	5	6	.
132	50	2	.	.	7	4	.
133	51	1	.	.	2	7	.
134	52	.	.	.	3	8	.
135	53	.	.	.	3	2	.
136	54	.	.	.	3	11	.
137	55	.	.	.	6	16	.
138	56	1	1	.	7	24	.
139	57	.	.	.	18	20	.
140	58	.	.	.	18	10	.
141	59	.	.	.	20	18	.
142	60	.	.	.	14	14	.
143	61	.	.	.	13	2	.
144	62	.	1	.	13	1	.
145	63	.	1	.	15	3	.
146	64	1	2	.	14	4	.
147	65	3	.	.	7	.	.
148	66	2	.	.	7	.	.

JER datacut EBV (me) and official EBV (e) for nongenotyped females with phenotype

Obs	diff	d_dSB1	d_dCE1	d_dCS1	d_dSB2	d_dCE2	d_dCS2
149	67	3	.	.	1	.	.
150	68	1	.	.	3	.	.
151	70	1	.	.	.	.	.
152	71	2	.	.	1	.	.
153	72	2	1	.	1	.	.
154	73	.	.	.	.	.	.
155	74	.	.	.	1	.	.
156	77	.	.	.	.	1	.
157	78	.	.	.	.	1	.
158	79	.	.	.	.	2	.
159	82	.	2	.	.	.	.
160	83	.	2	.	.	.	.
161	84	.	4	.	.	.	.
162	85	.	1	.	.	.	.
163	87	.	1	.	.	.	.
164	88	.	1	.	.	.	.
165	89	.	1	.	1	1	.
166	91	.	.	.	1	.	.
167	92	.	.	.	1	.	.
168	93	.	.	.	1	.	.
169	95	.	.	.	.	1	.
170	98	.	.	.	2	.	.
171	99	.	.	.	1	.	.
172	100	.	.	.	.	.	.
173	101	.	.	.	.	1	.
174	103	.	.	.	.	.	.
175	104	.	.	.	1	.	.
176	105	.	.	.	1	1	.
177	106	.	.	.	.	.	.
178	107	.	.	.	.	1	.
179	108	.	.	.	.	3	.
180	109	.	.	.	1	.	.
181	110	.	.	.	.	5	.
182	111	.	.	.	1	1	.
183	112	.	.	.	.	.	.
184	113	.	.	.	1	1	.
185	114	.	.	.	.	2	.

JER datacut EBV (me) and official EBV (e) for nongenotyped females with phenotype

Obs	diff	d_dSB1	d_dCE1	d_dCS1	d_dSB2	d_dCE2	d_dCS2
186	115	.	.	.	.	.	.
187	116	.	.	.	2	1	.
188	117	.	.	.	.	.	.
189	118	.	.	.	2	1	.
190	119	.	.	.	.	1	.
191	120	.	.	.	.	2	.
192	121	.	.	.	1	1	.
193	122	.	.	.	4	.	.
194	123	.	.	.	2	.	.
195	125	.	.	.	1	.	.
196	126	.	.	.	4	.	.
197	127	.	.	.	3	.	.
198	128	.	.	.	1	.	.
199	129	.	.	.	3	.	.
200	130	.	.	.	2	.	.
201	131	.	.	.	2	.	.
202	133	.	.	.	1	.	.
203	136	.	.	.	1	.	.
204	141	.	.	.	1	.	.

JER datacut EBV (me) and official EBV (e) for nongenotyped females with phenotype

Obs	diff	d_mSB1	d_mCE1	d_mCS1	d_mSB2	d_mCE2	d_mCS2
1	-131	.	.	.	1	.	.
2	-98	.	.	.	.	1	.
3	-83	.	.	.	1	.	.
4	-82	.	.	.	1	.	.
5	-79	.	.	.	1	.	.
6	-78	.	.	.	1	.	.
7	-77	.	.	.	1	.	.
8	-76	.	.	.	.	.	.
9	-74	.	.	.	1	.	.
10	-73	.	.	.	.	.	.
11	-72	.	.	.	.	.	.
12	-71	.	.	.	1	.	.
13	-70	.	.	.	1	.	.
14	-69	.	.	.	.	.	.
15	-68	.	.	.	2	.	.
16	-67	.	.	.	3	.	.
17	-66	.	.	.	3	.	.
18	-65	.	.	.	1	.	.
19	-64	.	.	.	2	.	.
20	-63	.	.	.	.	.	.
21	-62	.	.	.	2	.	.
22	-61	.	.	.	.	.	.
23	-60	.	.	.	2	1	.
24	-59	.	.	.	2	.	.
25	-57	.	.	.	1	2	.
26	-56	.	.	.	1	6	.
27	-55	.	.	.	.	1	.
28	-54	.	.	.	1	.	.
29	-53	.	.	.	2	2	.
30	-52	1	.	.	.	.	.
31	-51	.	.	.	2	1	.
32	-50	.	.	.	.	.	.
33	-49	.	.	.	.	.	.
34	-48	2	.	.	1	2	.
35	-47	1	.	.	3	.	.
36	-46	2	.	.	1	.	.
37	-45	1	1	.	3	2	.

JER datacut EBV (me) and official EBV (e) for nongenotyped females with phenotype

Obs	diff	d_mSB1	d_mCE1	d_mCS1	d_mSB2	d_mCE2	d_mCS2
38	-44	3	2	.	5	.	.
39	-43	3	1	.	4	2	.
40	-42	3	.	.	5	2	.
41	-41	2	.	.	2	.	.
42	-40	.	1	.	12	1	.
43	-39	6	5	.	14	1	.
44	-38	4	1	.	20	3	.
45	-37	.	2	.	16	2	.
46	-36	5	2	.	26	2	.
47	-35	2	2	.	21	2	.
48	-34	1	5	.	35	5	.
49	-33	3	3	.	27	6	.
50	-32	.	.	.	32	9	.
51	-31	1	3	.	14	4	.
52	-30	3	1	.	12	8	.
53	-29	1	1	.	12	22	.
54	-28	4	2	.	12	50	.
55	-27	2	2	.	15	60	.
56	-26	3	4	.	29	24	.
57	-25	14	6	.	29	19	.
58	-24	23	2	.	45	3	.
59	-23	33	9	.	66	8	.
60	-22	32	25	.	98	17	.
61	-21	31	26	.	139	14	.
62	-20	49	40	.	216	11	.
63	-19	54	72	.	385	22	.
64	-18	32	28	.	551	30	.
65	-17	38	23	.	720	43	.
66	-16	34	35	2	794	151	.
67	-15	34	34	1	974	276	.
68	-14	41	29	.	921	511	.
69	-13	117	45	.	749	720	.
70	-12	350	119	.	849	582	.
71	-11	662	401	5	876	542	.
72	-10	1150	846	12	772	456	4
73	-9	1187	1194	25	1319	456	1
74	-8	1013	996	56	1891	597	15

JER datacut EBV (me) and official EBV (e) for nongenotyped females with phenotype

Obs	diff	d_mSB1	d_mCE1	d_mCS1	d_mSB2	d_mCE2	d_mCS2
75	-7	849	802	144	2413	890	20
76	-6	1447	976	334	2437	1489	36
77	-5	2911	1883	701	2643	1960	108
78	-4	3300	3155	1518	3062	2394	229
79	-3	5490	4480	3458	4348	3899	623
80	-2	10311	10568	7897	5729	5861	1905
81	-1	28383	33046	24365	10031	11240	6303
82	0	161374	163827	134386	26426	35431	25969
83	1	109569	91953	110469	60779	82519	67329
84	2	37824	27192	24019	62173	63166	84994
85	3	16640	11977	8428	42751	32772	43316
86	4	7010	5860	3485	27672	17513	16816
87	5	3008	2958	1443	17396	9594	6925
88	6	1252	1518	507	10355	5169	2984
89	7	591	787	164	5784	2798	1302
90	8	208	425	42	3012	1503	484
91	9	65	204	21	1503	755	140
92	10	28	108	6	791	449	38
93	11	15	65	3	378	285	10
94	12	2	36	.	175	132	3
95	13	3	24	.	98	81	.
96	14	1	23	.	54	42	1
97	15	.	8	.	20	26	.
98	16	1	5	.	12	17	.
99	17	.	1	.	9	10	.
100	18	.	.	.	2	11	.
101	19	.	1	.	3	7	.
102	20	.	.	.	1	5	.
103	21	.	.	.	.	1	.
104	22	.	.	.	1	1	.
105	23	.	.	.	.	.	.
106	24	.	.	.	.	1	.
107	25	.	.	.	.	.	.
108	26	.	.	.	.	.	.
109	27	.	.	.	.	.	.
110	28	.	.	.	.	1	.
111	29	.	.	.	.	.	.

JER datacut EBV (me) and official EBV (e) for nongenotyped females with phenotype

Obs	diff	d_mSB1	d_mCE1	d_mCS1	d_mSB2	d_mCE2	d_mCS2
112	30	.	.	.	.	.	.
113	31	.	.	.	.	.	.
114	32	.	.	.	.	.	.
115	33	.	.	.	.	.	.
116	34	.	.	.	.	.	.
117	35	.	.	.	.	.	.
118	36	.	.	.	.	.	.
119	37	.	.	.	.	.	.
120	38	.	.	.	.	.	.
121	39	.	.	.	.	.	.
122	40	.	.	.	.	.	.
123	41	.	.	.	.	.	.
124	42	.	.	.	.	.	.
125	43	.	.	.	.	.	.
126	44	.	.	.	.	.	.
127	45	.	.	.	.	.	.
128	46	.	.	.	.	.	.
129	47	.	.	.	.	.	.
130	48	.	.	.	.	.	.
131	49	.	.	.	.	.	.
132	50	.	.	.	.	.	.
133	51	.	.	.	.	.	.
134	52	.	.	.	.	.	.
135	53	.	.	.	.	.	.
136	54	.	.	.	.	.	.
137	55	.	.	.	.	.	.
138	56	.	.	.	.	.	.
139	57	.	.	.	.	.	.
140	58	.	.	.	.	.	.
141	59	.	.	.	.	.	.
142	60	.	.	.	.	.	.
143	61	.	.	.	.	.	.
144	62	.	.	.	.	.	.
145	63	.	.	.	.	.	.
146	64	.	.	.	.	.	.
147	65	.	.	.	.	.	.
148	66	.	.	.	.	.	.

JER datacut EBV (me) and official EBV (e) for nongenotyped females with phenotype

Obs	diff	d_mSB1	d_mCE1	d_mCS1	d_mSB2	d_mCE2	d_mCS2
149	67	.	.	.	.	.	.
150	68	.	.	.	.	.	.
151	70	.	.	.	.	.	.
152	71	.	.	.	.	.	.
153	72	.	.	.	.	.	.
154	73	.	.	.	.	.	.
155	74	.	.	.	.	.	.
156	77	.	.	.	.	.	.
157	78	.	.	.	.	.	.
158	79	.	.	.	.	.	.
159	82	.	.	.	.	.	.
160	83	.	.	.	.	.	.
161	84	.	.	.	.	.	.
162	85	.	.	.	.	.	.
163	87	.	.	.	.	.	.
164	88	.	.	.	.	.	.
165	89	.	.	.	.	.	.
166	91	.	.	.	.	.	.
167	92	.	.	.	.	.	.
168	93	.	.	.	.	.	.
169	95	.	.	.	.	.	.
170	98	.	.	.	.	.	.
171	99	.	.	.	.	.	.
172	100	.	.	.	.	.	.
173	101	.	.	.	.	.	.
174	103	.	.	.	.	.	.
175	104	.	.	.	.	.	.
176	105	.	.	.	.	.	.
177	106	.	.	.	.	.	.
178	107	.	.	.	.	.	.
179	108	.	.	.	.	.	.
180	109	.	.	.	.	.	.
181	110	.	.	.	.	.	.
182	111	.	.	.	.	.	.
183	112	.	.	.	.	.	.
184	113	.	.	.	.	.	.
185	114	.	.	.	.	.	.

JER datacut EBV (me) and official EBV (e) for nongenotyped females with phenotype

Obs	diff	d_mSB1	d_mCE1	d_mCS1	d_mSB2	d_mCE2	d_mCS2
186	115	.	.	.	.	.	.
187	116	.	.	.	.	.	.
188	117	.	.	.	.	.	.
189	118	.	.	.	.	.	.
190	119	.	.	.	.	.	.
191	120	.	.	.	.	.	.
192	121	.	.	.	.	.	.
193	122	.	.	.	.	.	.
194	123	.	.	.	.	.	.
195	125	.	.	.	.	.	.
196	126	.	.	.	.	.	.
197	127	.	.	.	.	.	.
198	128	.	.	.	.	.	.
199	129	.	.	.	.	.	.
200	130	.	.	.	.	.	.
201	131	.	.	.	.	.	.
202	133	.	.	.	.	.	.
203	136	.	.	.	.	.	.
204	141	.	.	.	.	.	.

JER datacut EBV (me) and official EBV (e) for nongenotyped females with phenotype

Obs	diff	p_dSB1	p_dCE1	p_dCS1	p_dSB2	p_dCE2	p_dCS2
1	-131	.	.	.	.	.	.
2	-98	.	.	.	.	.	.
3	-83	.	.	.	.	.	.
4	-82	.	.	.	.	.	.
5	-79	.	.	.	.	.	.
6	-78	.	.	.	.	.	.
7	-77	.	.	.	.	.	.
8	-76	.	.	.	.	.	.
9	-74	.	.	.	.	.	.
10	-73	.	.	.	.	.	.
11	-72	.	.	.	.	.	.
12	-71	.	.	.	.	.	.
13	-70	.	.	.	.	.	.
14	-69	.	.	.	.	.	.
15	-68	.	.	.	.	.	.
16	-67	.	.	.	.	.	.
17	-66	.	.	.	.	.	.
18	-65	.	.	.	.	.	.
19	-64	.	.	.	.	.	.
20	-63	.	.	.	.	.	.
21	-62	.	.	.	.	.	.
22	-61	.	.	.	.	.	.
23	-60	.	.	.	.	.	.
24	-59	.	.	.	.	.	.
25	-57	.	.	.	.	.	.
26	-56	.	.	.	.	.	.
27	-55	.	.	.	.	.	.
28	-54	.	.	.	.	.	.
29	-53	.	.	.	.	.	.
30	-52	.	.	.	.	.	.
31	-51	.	.	.	.	.	.
32	-50	.	.	.	.	.	.
33	-49	.	.	.	.	.	.
34	-48	.	.	.	.	.	.
35	-47	.	.	.	.	.	.
36	-46	.	.	.	.	.	.
37	-45	.	.	.	.	.	.

JER datacut EBV (me) and official EBV (e) for nongenotyped females with phenotype

Obs	diff	p_dSB1	p_dCE1	p_dCS1	p_dSB2	p_dCE2	p_dCS2
38	-44	.	.	.	.	.	.
39	-43	.	.	.	.	.	.
40	-42	.	.	.	.	.	.
41	-41	.	.	.	.	.	.
42	-40	.	.	.	.	.	.
43	-39	.	.	.	.	.	.
44	-38	.	.	.	.	.	.
45	-37	.	.	.	0	.	.
46	-36	.	.	.	.	.	.
47	-35	.	.	.	0	0	.
48	-34	.	.	.	0	.	.
49	-33	.	.	.	0	0	.
50	-32	.	.	.	0	0	.
51	-31	.	.	.	0	.	.
52	-30	.	.	.	0	0	.
53	-29	.	.	.	0	0	.
54	-28	.	.	.	0	0	.
55	-27	0	.	.	0	0	.
56	-26	.	.	.	0	0	.
57	-25	.	.	.	0	0	.
58	-24	0	.	.	0	0	.
59	-23	0	0	.	0	0	.
60	-22	0	0	.	0	0	.
61	-21	0	0	.	0	0	.
62	-20	0	0	.	0	0	.
63	-19	0	0	.	0	0	.
64	-18	0	0	.	0	0	.
65	-17	0	0	.	0	0	.
66	-16	0	0	.	0	0	.
67	-15	0	0	.	1	1	.
68	-14	0	0	.	1	1	.
69	-13	0	0	.	1	1	.
70	-12	0	0	.	2	2	.
71	-11	0	1	0	2	2	0
72	-10	1	1	0	3	3	0
73	-9	1	2	0	4	3	0
74	-8	2	2	0	5	4	0

JER datacut EBV (me) and official EBV (e) for nongenotyped females with phenotype

Obs	diff	p_dSB1	p_dCE1	p_dCS1	p_dSB2	p_dCE2	p_dCS2
75	-7	3	3	0	6	5	0
76	-6	4	4	0	8	7	0
77	-5	6	6	0	9	8	0
78	-4	8	9	0	10	10	0
79	-3	12	11	1	11	11	1
80	-2	15	14	2	10	12	1
81	-1	19	17	13	8	11	7
82	0	19	19	67	6	8	54
83	1	6	7	13	4	4	24
84	2	1	1	3	2	2	7
85	3	1	1	1	1	1	3
86	4	0	0	0	1	1	1
87	5	0	0	0	1	1	1
88	6	0	0	0	1	0	0
89	7	0	0	0	1	0	0
90	8	0	0	0	0	0	0
91	9	0	0	0	0	0	0
92	10	0	0	0	0	0	0
93	11	0	0	.	0	0	0
94	12	0	0	.	0	0	0
95	13	0	0	0	0	0	0
96	14	0	0	.	0	0	0
97	15	0	0	.	0	0	.
98	16	0	0	.	0	0	.
99	17	0	0	.	0	0	.
100	18	0	0	.	0	0	.
101	19	0	0	.	0	0	.
102	20	0	0	.	0	0	.
103	21	0	0	.	0	0	.
104	22	0	0	.	0	0	.
105	23	0	0	.	0	0	.
106	24	0	0	.	0	0	.
107	25	0	0	.	0	0	.
108	26	0	0	.	0	0	.
109	27	0	0	.	0	0	.
110	28	0	0	.	0	0	.
111	29	0	.	.	0	0	.

JER datacut EBV (me) and official EBV (e) for nongenotyped females with phenotype

Obs	diff	p_dSB1	p_dCE1	p_dCS1	p_dSB2	p_dCE2	p_dCS2
112	30	0	0	.	0	0	.
113	31	0	0	.	0	0	.
114	32	0	0	.	0	0	.
115	33	0	0	.	0	0	.
116	34	0	0	.	0	0	.
117	35	0	.	.	0	0	.
118	36	0	0	.	0	0	.
119	37	0	0	.	0	0	.
120	38	0	0	.	0	0	.
121	39	0	0	.	0	0	.
122	40	.	0	.	0	0	.
123	41	.	0	.	0	0	.
124	42	.	0	.	0	0	.
125	43	0	0	.	0	0	.
126	44	.	0	.	0	0	.
127	45	0	0	.	0	0	.
128	46	.	0	.	0	0	.
129	47	.	0	.	0	0	.
130	48	.	.	.	0	.	.
131	49	0	.	.	0	0	.
132	50	0	.	.	0	0	.
133	51	0	.	.	0	0	.
134	52	.	.	.	0	0	.
135	53	.	.	.	0	0	.
136	54	.	.	.	0	0	.
137	55	.	.	.	0	0	.
138	56	0	0	.	0	0	.
139	57	.	.	.	0	0	.
140	58	.	.	.	0	0	.
141	59	.	.	.	0	0	.
142	60	.	.	.	0	0	.
143	61	.	.	.	0	0	.
144	62	.	0	.	0	0	.
145	63	.	0	.	0	0	.
146	64	0	0	.	0	0	.
147	65	0	.	.	0	.	.
148	66	0	.	.	0	.	.

JER datacut EBV (me) and official EBV (e) for nongenotyped females with phenotype

Obs	diff	p_dSB1	p_dCE1	p_dCS1	p_dSB2	p_dCE2	p_dCS2
149	67	0	.	.	0	.	.
150	68	0	.	.	0	.	.
151	70	0	.	.	.	.	.
152	71	0	.	.	0	.	.
153	72	0	0	.	0	.	.
154	73	.	.	.	.	.	.
155	74	.	.	.	0	.	.
156	77	.	.	.	.	0	.
157	78	.	.	.	.	0	.
158	79	.	.	.	.	0	.
159	82	.	0	.	.	.	.
160	83	.	0	.	.	.	.
161	84	.	0	.	.	.	.
162	85	.	0	.	.	.	.
163	87	.	0	.	.	.	.
164	88	.	0	.	.	.	.
165	89	.	0	.	0	0	.
166	91	.	.	.	0	.	.
167	92	.	.	.	0	.	.
168	93	.	.	.	0	.	.
169	95	.	.	.	.	0	.
170	98	.	.	.	0	.	.
171	99	.	.	.	0	.	.
172	100	.	.	.	.	.	.
173	101	.	.	.	.	0	.
174	103	.	.	.	.	.	.
175	104	.	.	.	0	.	.
176	105	.	.	.	0	0	.
177	106	.	.	.	.	.	.
178	107	.	.	.	.	0	.
179	108	.	.	.	.	0	.
180	109	.	.	.	0	.	.
181	110	.	.	.	.	0	.
182	111	.	.	.	0	0	.
183	112	.	.	.	.	.	.
184	113	.	.	.	0	0	.
185	114	.	.	.	.	0	.

JER datacut EBV (me) and official EBV (e) for nongenotyped females with phenotype

Obs	diff	p_dSB1	p_dCE1	p_dCS1	p_dSB2	p_dCE2	p_dCS2
186	115	.	.	.	.	.	.
187	116	.	.	.	0	0	.
188	117	.	.	.	.	.	.
189	118	.	.	.	0	0	.
190	119	.	.	.	.	0	.
191	120	.	.	.	.	0	.
192	121	.	.	.	0	0	.
193	122	.	.	.	0	.	.
194	123	.	.	.	0	.	.
195	125	.	.	.	0	.	.
196	126	.	.	.	0	.	.
197	127	.	.	.	0	.	.
198	128	.	.	.	0	.	.
199	129	.	.	.	0	.	.
200	130	.	.	.	0	.	.
201	131	.	.	.	0	.	.
202	133	.	.	.	0	.	.
203	136	.	.	.	0	.	.
204	141	.	.	.	0	.	.

JER datacut EBV (me) and official EBV (e) for nongenotyped females with phenotype

Obs	diff	p_mSB1	p_mCE1	p_mCS1	p_mSB2	p_mCE2	p_mCS2
1	-131	.	.	.	0	.	.
2	-98	.	.	.	.	0	.
3	-83	.	.	.	0	.	.
4	-82	.	.	.	0	.	.
5	-79	.	.	.	0	.	.
6	-78	.	.	.	0	.	.
7	-77	.	.	.	0	.	.
8	-76	.	.	.	.	.	.
9	-74	.	.	.	0	.	.
10	-73	.	.	.	.	.	.
11	-72	.	.	.	.	.	.
12	-71	.	.	.	0	.	.
13	-70	.	.	.	0	.	.
14	-69	.	.	.	.	.	.
15	-68	.	.	.	0	.	.
16	-67	.	.	.	0	.	.
17	-66	.	.	.	0	.	.
18	-65	.	.	.	0	.	.
19	-64	.	.	.	0	.	.
20	-63	.	.	.	.	.	.
21	-62	.	.	.	0	.	.
22	-61	.	.	.	.	.	.
23	-60	.	.	.	0	0	.
24	-59	.	.	.	0	.	.
25	-57	.	.	.	0	0	.
26	-56	.	.	.	0	0	.
27	-55	.	.	.	.	0	.
28	-54	.	.	.	0	.	.
29	-53	.	.	.	0	0	.
30	-52	0	.	.	.	.	.
31	-51	.	.	.	0	0	.
32	-50	.	.	.	.	.	.
33	-49	.	.	.	.	.	.
34	-48	0	.	.	0	0	.
35	-47	0	.	.	0	.	.
36	-46	0	.	.	0	.	.
37	-45	0	0	.	0	0	.

JER datacut EBV (me) and official EBV (e) for nongenotyped females with phenotype

Obs	diff	p_mSB1	p_mCE1	p_mCS1	p_mSB2	p_mCE2	p_mCS2
38	-44	0	0	.	0	.	.
39	-43	0	0	.	0	0	.
40	-42	0	.	.	0	0	.
41	-41	0	.	.	0	.	.
42	-40	.	0	.	0	0	.
43	-39	0	0	.	0	0	.
44	-38	0	0	.	0	0	.
45	-37	.	0	.	0	0	.
46	-36	0	0	.	0	0	.
47	-35	0	0	.	0	0	.
48	-34	0	0	.	0	0	.
49	-33	0	0	.	0	0	.
50	-32	.	.	.	0	0	.
51	-31	0	0	.	0	0	.
52	-30	0	0	.	0	0	.
53	-29	0	0	.	0	0	.
54	-28	0	0	.	0	0	.
55	-27	0	0	.	0	0	.
56	-26	0	0	.	0	0	.
57	-25	0	0	.	0	0	.
58	-24	0	0	.	0	0	.
59	-23	0	0	.	0	0	.
60	-22	0	0	.	0	0	.
61	-21	0	0	.	0	0	.
62	-20	0	0	.	0	0	.
63	-19	0	0	.	0	0	.
64	-18	0	0	.	0	0	.
65	-17	0	0	.	0	0	.
66	-16	0	0	0	0	0	.
67	-15	0	0	0	0	0	.
68	-14	0	0	.	0	0	.
69	-13	0	0	.	0	0	.
70	-12	0	0	.	0	0	.
71	-11	0	0	0	0	0	.
72	-10	0	0	0	0	0	0
73	-9	0	0	0	0	0	0
74	-8	0	0	0	1	0	0

JER datacut EBV (me) and official EBV (e) for nongenotyped females with phenotype

Obs	diff	p_mSB1	p_mCE1	p_mCS1	p_mSB2	p_mCE2	p_mCS2
75	-7	0	0	0	1	0	0
76	-6	0	0	0	1	1	0
77	-5	1	1	0	1	1	0
78	-4	1	1	0	1	1	0
79	-3	1	1	1	1	1	0
80	-2	3	3	2	2	2	1
81	-1	7	9	8	3	4	2
82	0	41	45	42	9	12	10
83	1	28	25	34	20	29	26
84	2	10	7	7	21	22	33
85	3	4	3	3	14	12	17
86	4	2	2	1	9	6	6
87	5	1	1	0	6	3	3
88	6	0	0	0	3	2	1
89	7	0	0	0	2	1	1
90	8	0	0	0	1	1	0
91	9	0	0	0	0	0	0
92	10	0	0	0	0	0	0
93	11	0	0	0	0	0	0
94	12	0	0	.	0	0	0
95	13	0	0	.	0	0	.
96	14	0	0	.	0	0	0
97	15	.	0	.	0	0	.
98	16	0	0	.	0	0	.
99	17	.	0	.	0	0	.
100	18	.	.	.	0	0	.
101	19	.	0	.	0	0	.
102	20	.	.	.	0	0	.
103	21	.	.	.	.	0	.
104	22	.	.	.	0	0	.
105	23	.	.	.	.	.	.
106	24	.	.	.	.	0	.
107	25	.	.	.	.	.	.
108	26	.	.	.	.	.	.
109	27	.	.	.	.	.	.
110	28	.	.	.	.	0	.
111	29	.	.	.	.	.	.

JER datacut EBV (me) and official EBV (e) for nongenotyped females with phenotype

Obs	diff	p_mSB1	p_mCE1	p_mCS1	p_mSB2	p_mCE2	p_mCS2
112	30	.	.	.	.	.	.
113	31	.	.	.	.	.	.
114	32	.	.	.	.	.	.
115	33	.	.	.	.	.	.
116	34	.	.	.	.	.	.
117	35	.	.	.	.	.	.
118	36	.	.	.	.	.	.
119	37	.	.	.	.	.	.
120	38	.	.	.	.	.	.
121	39	.	.	.	.	.	.
122	40	.	.	.	.	.	.
123	41	.	.	.	.	.	.
124	42	.	.	.	.	.	.
125	43	.	.	.	.	.	.
126	44	.	.	.	.	.	.
127	45	.	.	.	.	.	.
128	46	.	.	.	.	.	.
129	47	.	.	.	.	.	.
130	48	.	.	.	.	.	.
131	49	.	.	.	.	.	.
132	50	.	.	.	.	.	.
133	51	.	.	.	.	.	.
134	52	.	.	.	.	.	.
135	53	.	.	.	.	.	.
136	54	.	.	.	.	.	.
137	55	.	.	.	.	.	.
138	56	.	.	.	.	.	.
139	57	.	.	.	.	.	.
140	58	.	.	.	.	.	.
141	59	.	.	.	.	.	.
142	60	.	.	.	.	.	.
143	61	.	.	.	.	.	.
144	62	.	.	.	.	.	.
145	63	.	.	.	.	.	.
146	64	.	.	.	.	.	.
147	65	.	.	.	.	.	.
148	66	.	.	.	.	.	.

JER datacut EBV (me) and official EBV (e) for nongenotyped females with phenotype

Obs	diff	p_mSB1	p_mCE1	p_mCS1	p_mSB2	p_mCE2	p_mCS2
149	67	.	.	.	.	.	.
150	68	.	.	.	.	.	.
151	70	.	.	.	.	.	.
152	71	.	.	.	.	.	.
153	72	.	.	.	.	.	.
154	73	.	.	.	.	.	.
155	74	.	.	.	.	.	.
156	77	.	.	.	.	.	.
157	78	.	.	.	.	.	.
158	79	.	.	.	.	.	.
159	82	.	.	.	.	.	.
160	83	.	.	.	.	.	.
161	84	.	.	.	.	.	.
162	85	.	.	.	.	.	.
163	87	.	.	.	.	.	.
164	88	.	.	.	.	.	.
165	89	.	.	.	.	.	.
166	91	.	.	.	.	.	.
167	92	.	.	.	.	.	.
168	93	.	.	.	.	.	.
169	95	.	.	.	.	.	.
170	98	.	.	.	.	.	.
171	99	.	.	.	.	.	.
172	100	.	.	.	.	.	.
173	101	.	.	.	.	.	.
174	103	.	.	.	.	.	.
175	104	.	.	.	.	.	.
176	105	.	.	.	.	.	.
177	106	.	.	.	.	.	.
178	107	.	.	.	.	.	.
179	108	.	.	.	.	.	.
180	109	.	.	.	.	.	.
181	110	.	.	.	.	.	.
182	111	.	.	.	.	.	.
183	112	.	.	.	.	.	.
184	113	.	.	.	.	.	.
185	114	.	.	.	.	.	.

JER datacut EBV (me) and official EBV (e) for nongenotyped females with phenotype

Obs	diff	p_mSB1	p_mCE1	p_mCS1	p_mSB2	p_mCE2	p_mCS2
186	115	.	.	.	.	.	.
187	116	.	.	.	.	.	.
188	117	.	.	.	.	.	.
189	118	.	.	.	.	.	.
190	119	.	.	.	.	.	.
191	120	.	.	.	.	.	.
192	121	.	.	.	.	.	.
193	122	.	.	.	.	.	.
194	123	.	.	.	.	.	.
195	125	.	.	.	.	.	.
196	126	.	.	.	.	.	.
197	127	.	.	.	.	.	.
198	128	.	.	.	.	.	.
199	129	.	.	.	.	.	.
200	130	.	.	.	.	.	.
201	131	.	.	.	.	.	.
202	133	.	.	.	.	.	.
203	136	.	.	.	.	.	.
204	141	.	.	.	.	.	.

JER datacut EBV (me) and official EBV (e) for nordic AI bulls with minimum 15 offspring

Obs	BYR	name	no	mean_noff	std_noff	mean_me	mean_e	std_me	std_e	mean_dif	std_dif	corr
1	2000	dSB1	72	208	528	94.5	99.6	11.1	10.9	-5.1	1.5	0.99
2	2001	dSB1	51	436	1492	97.9	102.5	9.6	9.6	-4.6	1.4	0.99
3	2002	dSB1	55	207	563	94.5	98.0	8.6	8.4	-3.5	1.4	0.99
4	2003	dSB1	54	386	1541	97.6	100.8	9.1	8.8	-3.2	1.5	0.99
5	2004	dSB1	48	638	2258	96.8	99.4	9.9	9.3	-2.6	1.2	0.99
6	2005	dSB1	44	328	1020	97.0	99.4	10.2	9.7	-2.4	1.2	0.99
7	2006	dSB1	49	241	977	94.9	97.6	9.7	9.3	-2.7	0.9	1.00
8	2007	dSB1	55	324	912	94.7	96.8	9.3	9.0	-2.1	0.8	1.00
9	2008	dSB1	45	264	384	92.5	94.3	11.3	10.8	-1.8	0.9	1.00
10	2009	dSB1	50	359	1006	94.8	96.4	8.3	7.9	-1.6	0.8	1.00
11	2010	dSB1	55	156	188	98.4	99.7	7.8	7.3	-1.3	0.7	1.00
12	2011	dSB1	47	137	158	97.1	98.4	8.9	8.4	-1.3	0.7	1.00
13	2012	dSB1	47	272	522	98.1	99.1	7.9	7.7	-0.9	0.5	1.00
14	2013	dSB1	50	218	498	96.2	97.1	8.7	8.1	-0.9	0.8	1.00
15	2014	dSB1	36	391	557	99.4	100.0	7.6	7.3	-0.6	0.5	1.00
16	2015	dSB1	30	877	858	98.9	99.0	6.8	6.5	-0.1	0.5	1.00
17	2016	dSB1	26	517	580	99.7	99.8	9.0	8.6	0.0	0.7	1.00
18	2017	dSB1	29	970	827	99.7	99.6	9.1	8.7	0.1	0.5	1.00
19	2018	dSB1	20	660	866	99.0	98.7	6.7	6.3	0.3	0.5	1.00
20	2019	dSB1	29	995	760	102.4	101.9	12.7	12.1	0.5	0.8	1.00
21	2020	dSB1	24	913	760	98.7	98.3	12.3	11.6	0.4	0.9	1.00
22	2021	dSB1	14	515	511	104.9	104.3	8.9	8.6	0.6	0.6	1.00
23	2000	dCE1	72	190	486	101.0	106.1	11.0	10.6	-5.1	2.8	0.97
24	2001	dCE1	51	406	1399	99.5	104.4	10.3	9.9	-4.9	2.4	0.97
25	2002	dCE1	55	191	535	98.2	102.0	10.2	9.9	-3.8	2.1	0.98
26	2003	dCE1	54	360	1454	96.7	100.6	8.6	7.8	-3.9	2.1	0.97
27	2004	dCE1	48	604	2159	98.4	101.5	10.1	9.3	-3.1	1.6	0.99
28	2005	dCE1	44	316	990	100.0	102.8	8.3	7.3	-2.8	1.8	0.98
29	2006	dCE1	49	227	936	98.0	101.1	9.7	9.0	-3.1	1.3	0.99
30	2007	dCE1	55	309	881	94.7	97.5	9.3	8.5	-2.8	1.3	0.99
31	2008	dCE1	45	252	370	92.1	94.7	9.6	8.8	-2.6	1.4	0.99
32	2009	dCE1	50	348	988	96.6	98.8	7.9	7.4	-2.2	1.0	0.99
33	2010	dCE1	55	150	184	98.3	100.1	8.6	7.7	-1.8	1.1	1.00
34	2011	dCE1	47	135	163	97.1	98.9	8.4	7.8	-1.8	0.9	1.00
35	2012	dCE1	47	263	512	100.0	101.1	9.0	8.2	-1.1	1.0	1.00
36	2013	dCE1	50	210	486	95.0	96.5	8.8	7.9	-1.5	1.1	1.00
37	2014	dCE1	36	378	543	101.7	102.3	7.9	7.2	-0.6	1.0	1.00

JER datacut EBV (me) and official EBV (e) for nordic AI bulls with minimum 15 offspring

Obs	BYR	name	no	mean_noff	std_noff	mean_me	mean_e	std_me	std_e	mean_dif	std_dif	corr
38	2015	dCE1	30	844	834	101.9	101.7	9.2	8.5	0.1	0.9	1.00
39	2016	dCE1	26	490	554	98.8	99.1	7.4	6.8	-0.3	0.8	1.00
40	2017	dCE1	29	924	783	100.6	100.3	8.6	8.0	0.2	0.8	1.00
41	2018	dCE1	20	631	829	100.1	99.8	6.9	6.4	0.2	0.6	1.00
42	2019	dCE1	29	939	723	98.8	98.4	7.4	6.7	0.4	0.8	1.00
43	2020	dCE1	23	880	698	98.5	97.9	7.4	6.6	0.6	0.9	1.00
44	2021	dCE1	14	467	461	106.3	105.3	6.0	5.6	0.9	0.8	0.99
45	2000	dCS1	72	152	383	92.3	92.7	11.4	11.4	-0.5	1.0	1.00
46	2001	dCS1	51	330	1149	95.2	95.4	9.1	9.1	-0.1	0.9	0.99
47	2002	dCS1	55	156	433	95.4	95.5	10.0	10.0	-0.1	0.5	1.00
48	2003	dCS1	54	297	1212	98.7	98.8	10.0	10.0	-0.1	0.5	1.00
49	2004	dCS1	48	485	1759	97.5	97.6	7.8	7.8	-0.1	0.4	1.00
50	2005	dCS1	44	238	766	94.2	94.4	8.8	9.0	-0.2	0.5	1.00
51	2006	dCS1	49	183	739	93.4	93.6	8.0	8.0	-0.2	0.4	1.00
52	2007	dCS1	55	255	718	101.2	101.4	6.7	6.8	-0.2	0.4	1.00
53	2008	dCS1	45	207	304	99.8	100.0	6.1	6.1	-0.2	0.3	1.00
54	2009	dCS1	50	281	786	99.5	99.5	8.3	8.4	0.0	0.4	1.00
55	2010	dCS1	55	116	143	97.1	97.2	6.4	6.4	-0.1	0.3	1.00
56	2011	dCS1	47	107	118	99.5	99.6	7.6	7.5	-0.1	0.3	1.00
57	2012	dCS1	47	220	422	98.2	98.3	6.7	6.8	-0.1	0.3	1.00
58	2013	dCS1	50	186	415	99.1	99.3	7.2	7.2	-0.1	0.3	1.00
59	2014	dCS1	36	333	466	96.2	96.3	6.6	6.6	0.0	0.3	1.00
60	2015	dCS1	30	715	688	98.2	98.2	5.9	5.9	0.0	0.3	1.00
61	2016	dCS1	25	472	513	101.0	101.1	5.5	5.6	-0.1	0.3	1.00
62	2017	dCS1	29	802	681	101.4	101.4	6.0	6.1	0.0	0.3	1.00
63	2018	dCS1	20	588	776	101.0	101.1	3.9	4.0	-0.1	0.3	1.00
64	2019	dCS1	29	826	623	103.0	103.0	4.6	4.6	-0.1	0.3	1.00
65	2020	dCS1	22	852	637	100.6	100.7	5.2	5.1	-0.1	0.3	1.00
66	2021	dCS1	14	440	432	102.5	102.5	6.5	6.6	0.0	0.4	1.00
67	2000	dSB2	72	420	886	94.3	102.5	11.9	9.9	-8.2	3.1	0.97
68	2001	dSB2	52	833	2702	96.0	103.5	11.1	9.8	-7.5	2.7	0.97
69	2002	dSB2	55	448	1060	92.8	99.6	10.0	8.7	-6.8	2.8	0.97
70	2003	dSB2	54	704	2475	93.3	99.4	10.8	9.3	-6.1	2.2	0.99
71	2004	dSB2	48	1176	3770	96.0	100.7	11.7	9.7	-4.7	2.7	0.99
72	2005	dSB2	44	698	1787	95.6	100.4	10.3	8.6	-4.8	2.3	0.99
73	2006	dSB2	49	486	1491	94.8	99.4	10.6	8.7	-4.6	2.3	0.99
74	2007	dSB2	55	654	1582	93.0	97.3	10.6	8.8	-4.3	2.3	0.99

JER datacut EBV (me) and official EBV (e) for nordic AI bulls with minimum 15 offspring

Obs	BYR	name	no	mean_noff	std_noff	mean_me	mean_e	std_me	std_e	mean_dif	std_dif	corr
75	2008	dSB2	45	583	731	90.5	94.8	11.9	10.0	-4.3	2.3	0.99
76	2009	dSB2	51	722	1737	93.3	97.1	9.4	7.6	-3.8	2.0	0.99
77	2010	dSB2	55	395	389	97.1	99.8	8.8	7.3	-2.7	1.7	1.00
78	2011	dSB2	48	320	262	94.7	97.7	9.4	7.8	-3.1	1.8	1.00
79	2012	dSB2	47	593	976	96.1	98.5	8.9	7.3	-2.3	1.7	1.00
80	2013	dSB2	51	457	692	93.3	96.0	10.3	8.3	-2.8	2.1	1.00
81	2014	dSB2	37	750	823	96.0	98.1	7.3	6.0	-2.1	1.4	1.00
82	2015	dSB2	30	1666	1422	98.0	98.8	7.2	6.0	-0.8	1.3	1.00
83	2016	dSB2	26	1086	989	95.8	97.0	10.7	8.8	-1.2	1.9	1.00
84	2017	dSB2	29	1665	1218	101.1	101.1	8.9	7.4	0.0	1.6	1.00
85	2018	dSB2	20	919	1041	99.6	99.6	8.8	7.2	0.0	1.6	1.00
86	2019	dSB2	31	1212	958	101.0	100.7	14.6	11.9	0.3	2.8	1.00
87	2020	dSB2	25	901	792	99.8	99.6	14.2	11.8	0.3	2.6	1.00
88	2021	dSB2	12	554	455	106.7	105.4	10.0	8.4	1.3	1.8	1.00
89	2000	dCE2	72	380	809	100.5	107.3	10.0	8.8	-6.8	2.3	0.98
90	2001	dCE2	52	777	2540	98.7	105.5	12.9	10.5	-6.8	3.0	0.99
91	2002	dCE2	55	414	1023	97.8	103.6	12.6	10.6	-5.7	2.8	0.99
92	2003	dCE2	54	653	2323	95.9	101.3	10.1	8.7	-5.4	2.0	0.99
93	2004	dCE2	48	1110	3593	99.3	103.5	10.2	8.8	-4.2	2.0	0.99
94	2005	dCE2	44	673	1756	100.8	104.5	8.6	7.4	-3.8	1.8	0.99
95	2006	dCE2	49	457	1434	97.0	101.5	10.5	8.7	-4.5	2.2	0.99
96	2007	dCE2	55	621	1545	95.7	99.7	10.3	8.6	-3.9	2.0	0.99
97	2008	dCE2	45	551	704	94.7	98.2	11.6	9.9	-3.5	2.1	0.99
98	2009	dCE2	51	697	1709	96.6	99.8	10.5	8.7	-3.2	1.9	1.00
99	2010	dCE2	55	382	389	99.0	101.6	9.6	8.2	-2.6	1.6	1.00
100	2011	dCE2	47	315	274	97.0	99.7	9.3	7.9	-2.7	1.6	1.00
101	2012	dCE2	47	571	967	98.6	100.6	9.3	7.8	-2.0	1.6	1.00
102	2013	dCE2	51	435	678	95.2	97.5	9.5	8.0	-2.3	1.6	1.00
103	2014	dCE2	37	714	789	100.3	101.5	7.9	6.6	-1.2	1.5	1.00
104	2015	dCE2	30	1598	1390	101.7	101.8	7.6	6.5	-0.2	1.2	1.00
105	2016	dCE2	26	1025	949	97.8	98.6	8.6	7.1	-0.8	1.6	1.00
106	2017	dCE2	29	1595	1173	100.0	100.0	10.9	9.4	-0.1	1.6	1.00
107	2018	dCE2	20	868	999	100.2	100.1	9.9	8.4	0.0	1.6	1.00
108	2019	dCE2	31	1146	930	97.7	97.6	10.5	8.7	0.1	1.8	1.00
109	2020	dCE2	25	840	738	96.6	96.4	11.9	9.8	0.1	2.2	1.00
110	2021	dCE2	12	512	419	105.3	104.2	6.8	6.2	1.1	1.3	0.98
111	2000	dCS2	72	309	635	92.4	92.1	11.2	11.2	0.3	0.7	1.00

JER datacut EBV (me) and official EBV (e) for nordic AI bulls with minimum 15 offspring

Obs	BYR	name	no	mean_noff	std_noff	mean_me	mean_e	std_me	std_e	mean_dif	std_dif	corr
112	2001	dCS2	52	627	2049	95.2	95.0	9.5	9.5	0.3	0.7	1.00
113	2002	dCS2	55	338	813	95.7	95.6	10.2	10.1	0.2	0.5	1.00
114	2003	dCS2	54	545	1938	98.1	97.8	10.1	10.3	0.3	0.4	1.00
115	2004	dCS2	48	892	2908	96.8	96.6	8.1	8.1	0.2	0.4	1.00
116	2005	dCS2	44	508	1334	93.9	93.8	9.2	9.2	0.1	0.4	1.00
117	2006	dCS2	49	375	1120	92.4	92.2	7.7	7.6	0.2	0.3	1.00
118	2007	dCS2	55	511	1223	100.2	100.1	6.4	6.5	0.1	0.3	1.00
119	2008	dCS2	45	461	583	100.6	100.5	7.2	7.3	0.1	0.4	1.00
120	2009	dCS2	51	570	1358	99.3	99.2	8.8	8.8	0.2	0.3	1.00
121	2010	dCS2	55	299	289	98.0	98.0	6.1	6.1	0.0	0.3	1.00
122	2011	dCS2	47	250	178	99.2	99.2	7.4	7.4	0.0	0.3	1.00
123	2012	dCS2	47	483	782	98.6	98.6	7.1	7.1	0.0	0.3	1.00
124	2013	dCS2	51	392	574	98.8	98.9	7.0	7.0	0.0	0.3	1.00
125	2014	dCS2	37	646	693	96.6	96.6	7.0	7.0	0.0	0.3	1.00
126	2015	dCS2	30	1362	1122	97.6	97.9	6.3	6.4	-0.2	0.3	1.00
127	2016	dCS2	26	957	874	99.6	99.8	6.6	6.6	-0.2	0.3	1.00
128	2017	dCS2	29	1371	983	101.1	101.5	6.4	6.4	-0.4	0.3	1.00
129	2018	dCS2	20	796	924	98.4	98.7	4.0	3.9	-0.3	0.3	1.00
130	2019	dCS2	31	969	763	102.6	102.9	4.8	4.8	-0.2	0.3	1.00
131	2020	dCS2	24	791	661	101.4	101.5	4.7	4.8	-0.1	0.3	1.00
132	2021	dCS2	12	480	393	100.9	100.9	4.1	4.3	0.0	0.7	0.99
133	2000	mSB1	72	215	532	91.8	90.0	10.4	10.3	1.8	1.2	0.99
134	2001	mSB1	51	491	1646	90.7	89.1	8.6	8.5	1.6	1.0	0.99
135	2002	mSB1	55	237	630	89.4	88.2	8.8	8.6	1.2	1.1	0.99
136	2003	mSB1	54	409	1488	94.6	93.2	9.6	9.7	1.4	1.0	0.99
137	2004	mSB1	48	657	2142	91.7	91.1	9.8	9.9	0.7	0.7	1.00
138	2005	mSB1	44	364	1005	90.3	89.7	9.5	9.3	0.7	0.8	1.00
139	2006	mSB1	49	256	854	88.9	88.3	12.7	12.6	0.6	0.6	1.00
140	2007	mSB1	55	324	809	91.1	90.7	8.8	8.6	0.3	0.6	1.00
141	2008	mSB1	45	287	392	90.9	90.7	9.8	9.6	0.2	0.6	1.00
142	2009	mSB1	51	381	1014	92.6	92.3	9.9	9.7	0.4	0.5	1.00
143	2010	mSB1	55	168	178	94.3	94.0	8.4	8.2	0.3	0.5	1.00
144	2011	mSB1	47	142	156	91.1	90.9	8.4	8.2	0.2	0.4	1.00
145	2012	mSB1	47	296	546	95.0	94.8	11.6	11.3	0.2	0.5	1.00
146	2013	mSB1	50	226	437	96.3	96.0	8.3	8.2	0.2	0.4	1.00
147	2014	mSB1	36	395	505	94.7	94.4	9.3	9.2	0.3	0.5	1.00
148	2015	mSB1	30	960	952	101.0	100.7	7.5	7.3	0.2	0.3	1.00

JER datacut EBV (me) and official EBV (e) for nordic AI bulls with minimum 15 offspring

Obs	BYR	name	no	mean_noff	std_noff	mean_me	mean_e	std_me	std_e	mean_dif	std_dif	corr
149	2016	mSB1	26	654	687	98.7	98.6	9.4	9.2	0.2	0.6	1.00
150	2017	mSB1	29	989	787	100.2	100.0	8.9	8.7	0.2	0.4	1.00
151	2018	mSB1	20	636	841	96.9	96.7	10.6	10.7	0.1	0.4	1.00
152	2019	mSB1	29	581	583	103.2	102.9	7.2	7.0	0.2	0.4	1.00
153	2000	mCE1	72	197	495	95.0	93.3	8.5	8.4	1.7	1.4	0.99
154	2001	mCE1	51	464	1572	92.7	91.5	9.7	9.7	1.2	1.2	0.99
155	2002	mCE1	55	224	609	91.8	91.2	9.9	9.8	0.7	1.3	0.99
156	2003	mCE1	54	386	1416	95.6	94.6	9.1	9.4	1.0	1.1	0.99
157	2004	mCE1	48	627	2058	91.9	91.5	11.4	11.3	0.4	0.8	1.00
158	2005	mCE1	44	353	986	91.5	91.1	10.5	10.1	0.4	1.1	1.00
159	2006	mCE1	49	245	828	92.6	92.3	11.5	11.3	0.3	0.7	1.00
160	2007	mCE1	55	311	790	94.4	94.1	9.3	9.2	0.3	0.6	1.00
161	2008	mCE1	45	274	377	93.8	93.7	9.8	9.6	0.2	0.6	1.00
162	2009	mCE1	51	372	1006	96.9	96.6	9.6	9.4	0.3	0.6	1.00
163	2010	mCE1	55	163	176	95.1	94.9	9.3	9.2	0.1	0.5	1.00
164	2011	mCE1	47	139	161	96.5	96.2	9.0	8.9	0.2	0.4	1.00
165	2012	mCE1	47	285	534	97.2	97.1	9.9	9.8	0.1	0.4	1.00
166	2013	mCE1	50	216	423	98.0	97.8	10.2	9.9	0.2	0.5	1.00
167	2014	mCE1	36	375	483	97.1	97.0	8.8	8.6	0.1	0.4	1.00
168	2015	mCE1	30	920	926	103.5	103.2	6.5	6.4	0.3	0.3	1.00
169	2016	mCE1	26	620	655	99.6	99.6	8.2	8.0	0.0	0.9	0.99
170	2017	mCE1	29	927	733	102.2	101.9	6.4	6.4	0.3	0.3	1.00
171	2018	mCE1	20	594	795	97.4	97.0	5.6	5.4	0.3	0.7	0.99
172	2019	mCE1	29	534	539	103.9	103.5	5.9	5.7	0.4	0.4	1.00
173	2000	mCS1	72	162	405	101.9	101.3	9.8	10.4	0.7	1.7	0.99
174	2001	mCS1	51	380	1294	100.8	100.2	9.5	10.1	0.6	1.4	0.99
175	2002	mCS1	55	176	476	98.5	97.9	10.8	11.0	0.6	1.0	1.00
176	2003	mCS1	54	322	1206	99.4	98.8	9.8	9.9	0.5	0.8	1.00
177	2004	mCS1	48	520	1697	102.8	102.5	8.0	7.9	0.2	0.7	1.00
178	2005	mCS1	44	277	759	100.9	100.2	8.2	8.3	0.6	0.6	1.00
179	2006	mCS1	49	197	652	98.2	97.7	7.9	8.0	0.6	0.5	1.00
180	2007	mCS1	55	259	652	98.2	97.7	8.4	8.5	0.5	0.5	1.00
181	2008	mCS1	45	231	318	96.9	96.3	7.6	7.5	0.6	0.4	1.00
182	2009	mCS1	50	307	797	96.9	96.5	7.0	7.0	0.4	0.5	1.00
183	2010	mCS1	55	135	145	99.4	99.0	6.7	6.7	0.4	0.4	1.00
184	2011	mCS1	47	116	115	96.6	96.2	8.8	8.8	0.4	0.3	1.00
185	2012	mCS1	47	245	439	97.9	97.5	7.5	7.5	0.4	0.4	1.00

JER datacut EBV (me) and official EBV (e) for nordic AI bulls with minimum 15 offspring

Obs	BYR	name	no	mean_noff	std_noff	mean_me	mean_e	std_me	std_e	mean_dif	std_dif	corr
186	2013	mCS1	50	190	351	97.7	97.4	5.9	5.9	0.3	0.4	1.00
187	2014	mCS1	36	336	419	95.9	95.6	9.1	9.1	0.4	0.4	1.00
188	2015	mCS1	30	802	777	99.0	98.9	7.3	7.3	0.2	0.4	1.00
189	2016	mCS1	26	585	615	100.3	100.2	5.6	5.6	0.1	0.3	1.00
190	2017	mCS1	29	824	653	99.3	99.5	6.8	6.8	-0.2	0.4	1.00
191	2018	mCS1	20	562	754	100.9	101.3	7.2	7.3	-0.4	0.4	1.00
192	2019	mCS1	29	504	503	99.1	99.1	6.3	6.1	0.0	0.9	0.99
193	2000	mSB2	72	173	436	95.3	91.0	9.4	8.4	4.2	1.9	0.98
194	2001	mSB2	51	419	1432	95.1	90.9	9.4	9.1	4.1	1.8	0.98
195	2002	mSB2	55	199	527	95.5	92.1	12.1	10.6	3.5	2.1	0.99
196	2003	mSB2	54	341	1233	99.6	96.2	12.7	11.5	3.5	1.7	0.99
197	2004	mSB2	48	551	1795	96.0	93.5	10.2	9.6	2.5	1.4	0.99
198	2005	mSB2	44	309	848	95.9	93.6	9.7	8.8	2.3	1.6	0.99
199	2006	mSB2	49	206	668	95.5	93.3	12.0	11.1	2.1	1.4	1.00
200	2007	mSB2	55	263	672	96.2	94.4	7.4	6.8	1.8	1.3	0.99
201	2008	mSB2	45	233	324	95.6	94.2	10.1	9.6	1.4	1.1	0.99
202	2009	mSB2	51	316	866	98.6	97.0	8.4	7.7	1.6	1.0	1.00
203	2010	mSB2	55	136	150	96.5	95.3	8.5	7.8	1.2	1.0	1.00
204	2011	mSB2	47	115	134	97.1	95.9	9.2	8.3	1.2	1.1	1.00
205	2012	mSB2	47	231	406	98.0	97.1	9.5	8.7	1.0	1.1	1.00
206	2013	mSB2	50	180	335	98.4	97.5	8.6	8.0	0.9	0.8	1.00
207	2014	mSB2	36	313	398	96.1	95.5	10.0	9.3	0.7	0.9	1.00
208	2015	mSB2	30	678	638	98.7	98.2	9.6	8.9	0.5	1.0	1.00
209	2016	mSB2	26	418	444	98.3	97.8	13.0	11.9	0.6	1.4	1.00
210	2017	mSB2	29	454	372	99.6	99.3	9.9	8.9	0.3	1.3	1.00
211	2018	mSB2	14	332	373	98.0	97.7	14.5	13.2	0.3	1.5	1.00
212	2000	mCE2	72	163	416	98.9	95.8	9.3	8.9	3.1	1.6	0.99
213	2001	mCE2	51	404	1385	96.8	94.1	8.5	8.2	2.7	1.2	0.99
214	2002	mCE2	55	190	513	97.9	95.3	10.5	9.9	2.5	1.4	0.99
215	2003	mCE2	54	327	1187	97.9	95.6	10.5	9.9	2.3	1.0	1.00
216	2004	mCE2	48	532	1741	96.6	95.1	11.8	11.2	1.6	1.1	1.00
217	2005	mCE2	44	302	836	98.5	96.9	10.6	9.6	1.6	1.3	1.00
218	2006	mCE2	49	199	649	98.1	96.5	9.4	8.9	1.6	0.9	1.00
219	2007	mCE2	55	254	654	98.8	97.5	8.3	7.8	1.3	0.9	1.00
220	2008	mCE2	45	224	312	99.0	97.7	8.6	8.4	1.3	0.8	1.00
221	2009	mCE2	50	314	858	101.8	100.3	9.2	8.6	1.5	0.9	1.00
222	2010	mCE2	55	132	147	99.4	98.4	8.1	7.7	1.1	0.7	1.00

JER datacut EBV (me) and official EBV (e) for nordic AI bulls with minimum 15 offspring

Obs	BYR	name	no	mean_noff	std_noff	mean_me	mean_e	std_me	std_e	mean_dif	std_dif	corr
223	2011	mCE2	47	112	135	101.8	100.7	7.4	7.1	1.1	0.6	1.00
224	2012	mCE2	47	223	396	100.0	99.3	8.5	8.1	0.7	0.7	1.00
225	2013	mCE2	50	173	325	102.5	101.5	8.6	8.0	0.9	0.8	1.00
226	2014	mCE2	36	300	384	100.7	99.9	8.5	7.8	0.8	0.9	1.00
227	2015	mCE2	30	653	620	103.9	103.5	7.4	7.1	0.4	0.6	1.00
228	2016	mCE2	26	393	420	101.0	100.6	8.4	7.8	0.4	0.9	1.00
229	2017	mCE2	29	427	346	101.8	101.7	8.0	7.5	0.1	0.7	1.00
230	2018	mCE2	13	334	353	96.8	96.5	10.6	10.2	0.2	0.9	1.00
231	2000	mCS2	72	139	354	99.5	96.5	10.1	10.2	2.9	1.5	0.99
232	2001	mCS2	51	343	1181	95.4	92.5	8.6	8.5	2.8	1.1	0.99
233	2002	mCS2	55	161	418	96.9	94.1	9.8	9.8	2.7	1.0	0.99
234	2003	mCS2	54	292	1063	97.9	95.2	10.5	10.1	2.7	0.8	1.00
235	2004	mCS2	48	459	1498	101.0	98.7	10.2	9.9	2.4	0.8	1.00
236	2005	mCS2	44	245	679	99.2	96.8	8.5	8.2	2.4	0.7	1.00
237	2006	mCS2	49	166	521	95.1	93.1	8.1	7.8	2.0	0.6	1.00
238	2007	mCS2	55	218	543	96.0	94.1	8.6	8.4	1.9	0.6	1.00
239	2008	mCS2	45	197	272	93.9	92.2	8.1	7.8	1.7	0.5	1.00
240	2009	mCS2	50	262	680	94.4	92.9	8.2	8.0	1.5	0.5	1.00
241	2010	mCS2	55	113	122	97.1	95.6	7.2	6.9	1.4	0.5	1.00
242	2011	mCS2	47	94	94	94.0	92.6	9.0	8.8	1.4	0.5	1.00
243	2012	mCS2	47	193	327	96.9	95.8	6.6	6.5	1.0	0.5	1.00
244	2013	mCS2	50	153	270	95.7	94.8	6.4	6.3	0.9	0.5	1.00
245	2014	mCS2	36	269	336	96.9	96.2	7.7	7.5	0.7	0.5	1.00
246	2015	mCS2	30	563	507	97.9	97.9	6.9	6.7	0.1	0.5	1.00
247	2016	mCS2	25	385	397	98.9	98.9	6.7	6.7	0.0	0.4	1.00
248	2017	mCS2	29	386	319	99.1	99.6	6.9	7.0	-0.5	0.6	1.00
249	2018	mCS2	12	347	342	104.3	105.0	7.6	7.9	-0.8	0.9	0.99
250	2000	brth	72	208	528	94.7	102.6	11.5	10.4	-7.9	2.2	0.98
251	2001	brth	51	436	1492	97.2	104.0	10.3	9.5	-6.7	2.1	0.98
252	2002	brth	55	207	563	93.9	99.6	9.5	8.8	-5.8	2.1	0.98
253	2003	brth	54	386	1541	95.6	100.5	9.9	9.0	-4.9	1.7	0.99
254	2004	brth	48	638	2258	96.5	100.7	11.0	9.5	-4.2	2.1	0.99
255	2005	brth	44	328	1020	96.7	100.9	9.7	8.6	-4.2	1.9	0.99
256	2006	brth	49	241	977	94.8	98.9	10.4	9.2	-4.2	1.6	0.99
257	2007	brth	55	324	912	93.4	97.1	10.3	9.1	-3.7	1.6	0.99
258	2008	brth	45	264	384	90.9	94.3	11.9	10.5	-3.3	1.9	0.99
259	2009	brth	50	359	1006	93.9	96.9	8.4	7.3	-3.0	1.7	0.99

JER datacut EBV (me) and official EBV (e) for nordic AI bulls with minimum 15 offspring

Obs	BYR	name	no	mean_noff	std_noff	mean_me	mean_e	std_me	std_e	mean_dif	std_dif	corr
260	2010	brth	55	156	188	97.8	100.0	8.3	7.3	-2.2	1.4	0.99
261	2011	brth	47	137	158	96.0	98.3	8.9	7.8	-2.3	1.5	0.99
262	2012	brth	47	272	522	97.4	99.2	8.5	7.5	-1.8	1.3	0.99
263	2013	brth	50	218	498	94.4	96.3	9.8	8.5	-1.9	1.6	0.99
264	2014	brth	36	391	557	98.1	99.7	7.3	6.5	-1.6	1.2	0.99
265	2015	brth	30	877	858	99.1	99.6	6.9	6.2	-0.4	1.2	0.99
266	2016	brth	26	517	580	97.9	98.4	9.7	8.6	-0.5	1.4	1.00
267	2017	brth	29	970	827	100.3	100.3	9.5	8.6	0.1	1.1	1.00
268	2018	brth	20	660	866	99.3	99.2	7.7	6.7	0.1	1.4	0.99
269	2019	brth	29	995	760	101.8	101.0	13.5	11.5	0.8	2.2	1.00
270	2020	brth	24	913	760	98.6	98.0	13.7	12.1	0.5	1.8	1.00
271	2021	brth	14	515	511	105.9	105.1	9.4	8.0	0.7	1.6	1.00
272	2000	calv	72	215	532	92.9	89.7	9.2	8.6	3.2	1.7	0.98
273	2001	calv	51	491	1646	91.7	88.6	8.2	8.1	3.1	1.5	0.98
274	2002	calv	55	237	630	91.1	88.7	10.7	10.2	2.4	1.8	0.99
275	2003	calv	54	409	1488	96.2	93.4	10.8	10.4	2.8	1.6	0.99
276	2004	calv	48	657	2142	92.5	90.7	10.0	10.3	1.8	1.1	0.99
277	2005	calv	44	364	1005	92.0	90.3	10.1	9.8	1.7	1.2	0.99
278	2006	calv	49	256	854	91.1	89.6	11.9	11.6	1.5	1.4	0.99
279	2007	calv	55	324	809	92.7	91.8	7.8	7.7	0.9	1.4	0.98
280	2008	calv	45	287	392	92.6	91.6	10.0	10.0	1.1	1.1	0.99
281	2009	calv	51	381	1014	95.4	94.4	9.8	9.6	1.0	0.9	1.00
282	2010	calv	55	168	178	94.9	94.1	8.3	8.1	0.8	1.0	0.99
283	2011	calv	47	142	156	94.0	93.3	8.8	8.6	0.7	1.0	0.99
284	2012	calv	47	296	546	96.3	95.6	10.2	9.9	0.7	1.2	0.99
285	2013	calv	50	226	437	97.5	96.9	8.4	8.5	0.6	0.9	0.99
286	2014	calv	36	395	505	95.3	94.9	9.9	9.5	0.3	0.9	1.00
287	2015	calv	30	960	952	101.0	100.9	7.7	7.4	0.1	0.9	0.99
288	2016	calv	26	654	687	98.9	98.5	10.9	10.1	0.4	1.3	1.00
289	2017	calv	29	989	787	100.4	100.4	8.7	8.2	0.1	1.2	0.99
290	2018	calv	20	636	841	96.9	96.4	10.7	10.2	0.5	0.9	1.00
291	2019	calv	29	581	583	103.3	103.0	6.7	6.4	0.3	0.9	0.99

JER datacut EBV (me) and official EBV (e) for nordic AI bulls with minimum 15 offspring

Obs	diff	d_brth	d_calv	p_brth	p_calv
1	-17	.	.	.	.
2	-15	1	.	0	.
3	-14	.	.	.	.
4	-13	1	.	0	.
5	-12	2	.	0	.
6	-11	3	.	0	.
7	-10	14	.	2	.
8	-9	22	.	2	.
9	-8	45	.	5	.
10	-7	56	.	6	.
11	-6	62	.	7	.
12	-5	89	1	10	0
13	-4	119	.	13	.
14	-3	132	1	14	0
15	-2	115	17	12	2
16	-1	120	79	13	9
17	0	67	161	7	18
18	1	47	254	5	28
19	2	23	169	2	19
20	3	9	119	1	13
21	4	5	60	1	7
22	5	.	20	.	2
23	6	.	9	.	1
24	7	.	6	.	1
25	8	.	.	.	.
26	9	.	.	.	.

JER datacut EBV (me) and official EBV (e) for nordic AI bulls with minimum 15 offspring

Obs	diff	d_dSB1	d_dCE1	d_dCS1	d_dSB2	d_dCE2	d_dCS2
1	-17	.	.	.	1	1	.
2	-15	.	.	.	3	.	.
3	-14	.	1	.	2	.	.
4	-13	.	1	.	3	3	.
5	-12	.	1	.	7	2	.
6	-11	.	.	.	15	8	.
7	-10	1	4	.	27	9	.
8	-9	1	5	.	31	27	.
9	-8	3	11	.	43	33	.
10	-7	12	22	.	57	53	.
11	-6	33	44	.	99	62	.
12	-5	63	63	.	87	108	.
13	-4	80	101	.	106	130	.
14	-3	136	135	7	121	136	.
15	-2	182	183	7	121	103	1
16	-1	213	148	201	76	93	95
17	0	141	110	638	59	77	683
18	1	57	83	74	36	62	150
19	2	10	17	2	25	21	3
20	3	.	2	.	9	7	2
21	4	.	.	.	9	1	.
22	5	.	.	.	1	.	.
23	6	.	.	.	.	.	.
24	7	.	.	.	.	.	.
25	8	.	.	.	.	.	.
26	9	.	.	.	.	.	.

JER datacut EBV (me) and official EBV (e) for nordic AI bulls with minimum 15 offspring

Obs	diff	d_mSB1	d_mCE1	d_mCS1	d_mSB2	d_mCE2	d_mCS2
1	-17	.	.	.	.	.	.
2	-15	.	.	.	.	.	.
3	-14	.	.	.	.	.	.
4	-13	.	.	.	.	.	.
5	-12	.	.	.	.	.	.
6	-11	.	.	.	.	.	.
7	-10	.	.	.	.	.	.
8	-9	.	.	.	.	.	.
9	-8	.	.	.	.	.	.
10	-7	.	.	.	.	.	.
11	-6	.	.	.	.	.	.
12	-5	.	.	.	.	.	.
13	-4	1	2	.	.	.	.
14	-3	.	.	3	4	.	.
15	-2	2	7	13	6	7	7
16	-1	41	81	65	40	26	29
17	0	400	407	398	112	136	94
18	1	297	286	356	212	280	243
19	2	117	77	36	189	236	262
20	3	27	28	16	115	113	164
21	4	10	5	5	90	40	47
22	5	.	1	2	48	18	10
23	6	1	2	.	31	6	5
24	7	.	.	.	10	.	.
25	8	.	.	.	5	1	.
26	9	.	.	.	3	.	.

JER datacut EBV (me) and official EBV (e) for nordic AI bulls with minimum 15 offspring

Obs	diff	p_dSB1	p_dCE1	p_dCS1	p_dSB2	p_dCE2	p_dCS2
1	-17	.	.	.	0	0	.
2	-15	.	.	.	0	.	.
3	-14	.	0	.	0	.	.
4	-13	.	0	.	0	0	.
5	-12	.	0	.	1	0	.
6	-11	.	.	.	2	1	.
7	-10	0	0	.	3	1	.
8	-9	0	1	.	3	3	.
9	-8	0	1	.	5	4	.
10	-7	1	2	.	6	6	.
11	-6	4	5	.	11	7	.
12	-5	7	7	.	9	12	.
13	-4	9	11	.	11	14	.
14	-3	15	15	1	13	15	.
15	-2	20	20	1	13	11	0
16	-1	23	16	22	8	10	10
17	0	15	12	69	6	8	73
18	1	6	9	8	4	7	16
19	2	1	2	0	3	2	0
20	3	.	0	.	1	1	0
21	4	.	.	.	1	0	.
22	5	.	.	.	0	.	.
23	6	.	.	.	.	.	.
24	7	.	.	.	.	.	.
25	8	.	.	.	.	.	.
26	9	.	.	.	.	.	.

JER datacut EBV (me) and official EBV (e) for nordic AI bulls with minimum 15 offspring

Obs	diff	p_mSB1	p_mCE1	p_mCS1	p_mSB2	p_mCE2	p_mCS2
1	-17	.	.	.	.	.	.
2	-15	.	.	.	.	.	.
3	-14	.	.	.	.	.	.
4	-13	.	.	.	.	.	.
5	-12	.	.	.	.	.	.
6	-11	.	.	.	.	.	.
7	-10	.	.	.	.	.	.
8	-9	.	.	.	.	.	.
9	-8	.	.	.	.	.	.
10	-7	.	.	.	.	.	.
11	-6	.	.	.	.	.	.
12	-5	.	.	.	.	.	.
13	-4	0	0	.	.	.	.
14	-3	.	.	0	0	.	.
15	-2	0	1	1	1	1	1
16	-1	5	9	7	5	3	3
17	0	45	45	45	13	16	11
18	1	33	32	40	25	32	28
19	2	13	9	4	22	27	30
20	3	3	3	2	13	13	19
21	4	1	1	1	10	5	5
22	5	.	0	0	6	2	1
23	6	0	0	.	4	1	1
24	7	.	.	.	1	.	.
25	8	.	.	.	1	0	.
26	9	.	.	.	0	.	.

JER SS and traditional breeding value for nongenotyped females with phenotype

Obs	BYR	name	no	mean_ss	mean_e	std_ss	std_e	mean_dif	std_dif	corr_SS
1	2010	dSB1	10724	95.2	95.0	5.7	5.8	0.2	0.9	0.99
2	2011	dSB1	10826	95.1	95.2	5.8	5.7	-0.1	1.0	0.99
3	2012	dSB1	10427	97.1	97.3	5.6	5.5	-0.2	1.1	0.98
4	2013	dSB1	10462	96.8	97.1	5.4	5.3	-0.3	1.2	0.97
5	2014	dSB1	10625	97.3	97.5	5.4	5.3	-0.3	1.3	0.97
6	2015	dSB1	9680	97.0	97.3	5.5	5.4	-0.3	1.3	0.97
7	2016	dSB1	9920	97.6	98.1	5.6	5.5	-0.5	1.3	0.97
8	2017	dSB1	9072	97.0	97.4	5.2	5.2	-0.4	1.3	0.97
9	2018	dSB1	9352	97.8	98.1	5.0	5.0	-0.3	1.2	0.97
10	2019	dSB1	9620	97.8	98.1	5.7	5.8	-0.3	1.2	0.98
11	2020	dSB1	11984	98.5	98.4	5.7	5.8	0.1	1.1	0.98
12	2021	dSB1	12606	101.1	100.8	6.0	6.0	0.2	1.1	0.98
13	2022	dSB1	14357	101.2	100.7	5.8	5.9	0.5	1.1	0.98
14	2023	dSB1	14194	102.7	101.9	5.8	6.0	0.9	1.2	0.98
15	2024	dSB1	3445	104.4	103.5	5.6	5.8	0.9	1.3	0.97
16	2010	dCE1	10069	97.3	97.1	5.8	5.8	0.2	1.1	0.98
17	2011	dCE1	10196	97.8	97.8	5.3	5.3	0.0	1.1	0.98
18	2012	dCE1	9827	99.4	99.5	5.8	5.7	-0.1	1.2	0.98
19	2013	dCE1	9885	99.9	100.0	5.3	5.3	-0.1	1.4	0.97
20	2014	dCE1	10137	100.0	100.1	5.4	5.4	-0.1	1.4	0.97
21	2015	dCE1	9222	99.5	99.5	5.4	5.4	0.0	1.4	0.97
22	2016	dCE1	9499	100.7	100.8	5.4	5.4	-0.1	1.4	0.96
23	2017	dCE1	8596	99.6	99.6	5.8	5.8	0.0	1.4	0.97
24	2018	dCE1	8713	100.4	100.3	4.8	4.7	0.1	1.3	0.96
25	2019	dCE1	8884	99.4	99.3	5.3	5.2	0.1	1.3	0.97
26	2020	dCE1	11146	100.1	100.1	4.7	4.7	0.0	1.3	0.96
27	2021	dCE1	11847	100.1	100.1	4.8	4.7	0.0	1.3	0.97
28	2022	dCE1	13359	100.3	100.3	4.1	4.1	0.0	1.2	0.96
29	2023	dCE1	12788	100.9	100.7	4.2	4.3	0.3	1.3	0.95
30	2024	dCE1	3091	102.6	102.5	4.2	4.3	0.1	1.4	0.95
31	2010	dCS1	8960	97.8	98.2	6.0	6.0	-0.4	0.9	0.99
32	2011	dCS1	8979	97.3	97.6	5.7	5.7	-0.3	0.9	0.99
33	2012	dCS1	8665	96.8	97.0	5.6	5.7	-0.2	1.1	0.98
34	2013	dCS1	8762	96.2	96.4	5.3	5.3	-0.2	1.2	0.98
35	2014	dCS1	9195	96.3	96.4	5.4	5.4	-0.1	1.2	0.98
36	2015	dCS1	8594	97.6	97.7	6.2	6.2	-0.1	1.2	0.98
37	2016	dCS1	9028	97.4	97.4	5.5	5.5	0.0	1.2	0.98

JER SS and traditional breeding value for nongenotyped females with phenotype

Obs	BYR	name	no	mean_ss	mean_e	std_ss	std_e	mean_dif	std_dif	corr_SS
38	2017	dCS1	8143	98.1	98.1	5.3	5.3	0.0	1.2	0.97
39	2018	dCS1	8291	98.7	98.7	4.6	4.6	0.0	1.2	0.97
40	2019	dCS1	8614	99.7	99.7	4.8	4.9	0.1	1.1	0.97
41	2020	dCS1	10814	99.4	99.3	4.3	4.3	0.1	1.1	0.97
42	2021	dCS1	11512	100.5	100.4	4.1	4.1	0.1	1.0	0.97
43	2022	dCS1	13001	100.8	100.7	3.9	3.8	0.1	1.0	0.97
44	2023	dCS1	12467	100.8	100.7	4.0	4.0	0.1	1.0	0.97
45	2024	dCS1	3017	100.9	100.9	3.8	3.8	0.0	1.2	0.95
46	2010	dSB2	18402	94.4	93.8	5.9	6.0	0.6	1.0	0.98
47	2011	dSB2	18189	94.3	93.9	5.6	5.6	0.4	1.1	0.98
48	2012	dSB2	18640	95.0	94.7	5.2	5.2	0.4	1.2	0.97
49	2013	dSB2	18646	95.0	94.7	5.4	5.4	0.3	1.3	0.97
50	2014	dSB2	17799	95.0	94.8	5.0	5.0	0.2	1.3	0.96
51	2015	dSB2	17594	96.1	95.9	5.4	5.4	0.2	1.5	0.96
52	2016	dSB2	16353	95.4	95.4	5.0	4.9	0.0	1.4	0.96
53	2017	dSB2	14780	95.3	95.4	5.2	5.2	-0.1	1.3	0.97
54	2018	dSB2	16365	96.7	96.8	4.7	4.6	0.0	1.3	0.96
55	2019	dSB2	15565	97.1	97.1	6.1	6.1	0.0	1.2	0.98
56	2020	dSB2	15549	98.4	98.4	5.9	6.0	0.0	1.2	0.98
57	2021	dSB2	15568	99.8	99.8	6.2	6.3	0.0	1.2	0.98
58	2022	dSB2	15054	100.2	99.8	6.5	6.8	0.5	1.3	0.98
59	2023	dSB2	13574	101.1	100.5	6.7	6.9	0.6	1.3	0.98
60	2024	dSB2	2930	102.2	101.7	6.8	7.0	0.5	1.6	0.97
61	2010	dCE2	17221	99.3	98.5	6.3	6.3	0.9	1.2	0.98
62	2011	dCE2	16939	99.4	98.8	5.2	5.1	0.6	1.2	0.97
63	2012	dCE2	17467	99.1	98.4	5.6	5.6	0.6	1.3	0.97
64	2013	dCE2	17445	99.9	99.3	5.4	5.4	0.6	1.5	0.96
65	2014	dCE2	16930	100.0	99.4	5.4	5.3	0.6	1.6	0.96
66	2015	dCE2	16610	99.0	98.3	5.1	5.1	0.7	1.7	0.94
67	2016	dCE2	15528	99.8	99.5	5.1	5.0	0.3	1.7	0.94
68	2017	dCE2	13900	99.9	99.6	5.5	5.4	0.3	1.6	0.96
69	2018	dCE2	14942	99.4	98.9	4.6	4.6	0.5	1.5	0.95
70	2019	dCE2	14276	99.2	99.0	5.6	5.6	0.2	1.5	0.97
71	2020	dCE2	14457	100.5	100.6	5.4	5.4	-0.1	1.4	0.97
72	2021	dCE2	14306	100.0	99.8	5.7	5.6	0.2	1.5	0.97
73	2022	dCE2	13783	100.0	99.8	5.4	5.6	0.2	1.5	0.96
74	2023	dCE2	12470	100.7	100.6	5.3	5.4	0.1	1.6	0.96

JER SS and traditional breeding value for nongenotyped females with phenotype

Obs	BYR	name	no	mean_ss	mean_e	std_ss	std_e	mean_dif	std_dif	corr_SS
75	2024	dCE2	2687	100.8	101.2	5.0	5.1	-0.3	1.9	0.93
76	2010	dCS2	15385	96.9	97.1	5.8	5.9	-0.3	0.8	0.99
77	2011	dCS2	15060	96.8	97.1	5.8	5.9	-0.2	0.9	0.99
78	2012	dCS2	15593	97.2	97.4	5.7	5.8	-0.2	0.9	0.99
79	2013	dCS2	15375	97.1	97.2	5.2	5.3	-0.1	1.1	0.98
80	2014	dCS2	15450	96.6	96.7	5.7	5.7	-0.1	1.1	0.98
81	2015	dCS2	15705	98.4	98.4	6.2	6.2	-0.1	1.2	0.98
82	2016	dCS2	14842	97.4	97.6	5.5	5.5	-0.2	1.2	0.97
83	2017	dCS2	13314	97.9	98.0	5.3	5.3	-0.2	1.2	0.98
84	2018	dCS2	14345	98.3	98.4	4.7	4.7	-0.1	1.1	0.97
85	2019	dCS2	13871	99.2	99.3	4.6	4.6	-0.1	1.0	0.97
86	2020	dCS2	14035	99.1	99.1	4.6	4.6	0.0	1.0	0.98
87	2021	dCS2	13795	99.9	99.8	4.3	4.3	0.1	1.0	0.97
88	2022	dCS2	13368	100.5	100.4	4.1	4.1	0.1	1.1	0.97
89	2023	dCS2	12134	100.0	99.9	4.2	4.2	0.1	1.1	0.97
90	2024	dCS2	2598	100.2	100.0	4.1	4.1	0.1	1.2	0.96
91	2010	mSB1	19572	91.4	92.1	5.7	5.6	-0.8	1.4	0.97
92	2011	mSB1	18841	91.8	92.6	5.9	5.8	-0.8	1.4	0.97
93	2012	mSB1	18743	92.9	93.6	6.2	6.1	-0.6	1.6	0.97
94	2013	mSB1	16684	92.6	93.3	5.9	5.8	-0.7	1.7	0.96
95	2014	mSB1	17212	92.9	93.6	6.1	5.9	-0.7	1.8	0.96
96	2015	mSB1	16316	95.5	96.4	6.5	6.3	-0.8	1.9	0.96
97	2016	mSB1	15335	95.2	95.8	6.5	6.3	-0.6	1.8	0.96
98	2017	mSB1	14281	96.6	97.0	6.3	6.2	-0.4	1.8	0.96
99	2018	mSB1	15344	98.9	99.2	5.3	5.3	-0.3	1.7	0.95
100	2019	mSB1	14564	98.6	98.8	5.4	5.3	-0.1	1.7	0.95
101	2020	mSB1	13718	99.7	99.7	6.2	6.2	0.0	1.6	0.97
102	2021	mSB1	12906	99.8	99.7	6.2	6.1	0.2	1.6	0.97
103	2022	mSB1	3189	102.0	101.3	5.3	5.0	0.7	1.8	0.94
104	2010	mCE1	18429	93.0	94.0	5.6	5.8	-1.0	1.4	0.97
105	2011	mCE1	17590	94.4	95.4	5.4	5.5	-1.0	1.3	0.97
106	2012	mCE1	17759	94.6	95.5	5.6	5.7	-0.9	1.5	0.97
107	2013	mCE1	15822	94.3	95.2	5.5	5.5	-0.9	1.7	0.95
108	2014	mCE1	16349	95.6	96.5	5.5	5.6	-0.9	1.8	0.95
109	2015	mCE1	15488	97.0	98.0	5.8	5.8	-1.0	1.8	0.95
110	2016	mCE1	14302	96.4	97.2	5.8	5.9	-0.8	1.9	0.95
111	2017	mCE1	13241	99.0	99.5	5.7	5.7	-0.5	1.7	0.95

JER SS and traditional breeding value for nongenotyped females with phenotype

Obs	BYR	name	no	mean_ss	mean_e	std_ss	std_e	mean_dif	std_dif	corr_SS
112	2018	mCE1	14254	99.2	99.8	4.9	4.9	-0.5	1.6	0.94
113	2019	mCE1	13598	99.7	100.0	4.9	4.9	-0.3	1.5	0.95
114	2020	mCE1	12787	100.1	100.0	4.9	4.9	0.0	1.5	0.95
115	2021	mCE1	11815	100.2	99.8	4.6	4.5	0.5	1.5	0.95
116	2022	mCE1	2921	101.8	101.1	4.5	4.3	0.7	1.6	0.93
117	2010	mCS1	15485	98.0	98.4	5.4	5.4	-0.4	1.2	0.98
118	2011	mCS1	14633	97.5	97.9	5.2	5.2	-0.4	1.2	0.97
119	2012	mCS1	15331	97.6	97.9	4.9	4.9	-0.4	1.4	0.96
120	2013	mCS1	14409	97.3	97.9	4.7	4.7	-0.6	1.5	0.95
121	2014	mCS1	15237	96.7	97.2	4.9	5.0	-0.5	1.6	0.95
122	2015	mCS1	14270	97.2	97.7	4.9	4.7	-0.5	1.7	0.93
123	2016	mCS1	13453	97.5	98.0	4.8	4.8	-0.4	1.7	0.94
124	2017	mCS1	12639	97.7	98.1	4.9	4.8	-0.4	1.7	0.94
125	2018	mCS1	13716	97.5	97.7	4.8	4.8	-0.2	1.5	0.95
126	2019	mCS1	13126	98.0	98.1	4.3	4.3	-0.1	1.5	0.94
127	2020	mCS1	12439	99.9	99.8	5.1	5.1	0.1	1.4	0.96
128	2021	mCS1	11518	99.5	99.3	5.0	5.0	0.2	1.4	0.96
129	2022	mCS1	2846	99.1	98.9	4.2	4.1	0.2	1.5	0.94
130	2010	mSB2	15852	96.7	97.1	6.4	6.0	-0.4	1.7	0.96
131	2011	mSB2	15399	97.7	98.0	6.0	5.5	-0.4	1.8	0.96
132	2012	mSB2	15046	97.5	98.0	6.0	5.6	-0.5	2.0	0.94
133	2013	mSB2	13435	98.1	98.4	6.0	5.4	-0.3	2.3	0.93
134	2014	mSB2	13802	97.7	98.2	6.1	5.8	-0.5	2.3	0.93
135	2015	mSB2	13731	98.5	99.1	6.0	5.6	-0.6	2.4	0.92
136	2016	mSB2	12358	98.6	99.2	6.8	6.3	-0.6	2.3	0.94
137	2017	mSB2	10815	98.3	98.6	6.6	6.2	-0.3	2.3	0.94
138	2018	mSB2	10480	100.2	100.6	6.2	6.0	-0.4	2.3	0.93
139	2019	mSB2	7783	100.4	100.4	6.1	5.8	0.0	2.3	0.93
140	2020	mSB2	6627	100.1	100.1	7.4	7.4	0.0	2.1	0.96
141	2021	mSB2	1395	99.2	99.1	7.7	8.0	0.1	2.6	0.95
142	2022	mSB2	1	.	.	.	.	.	.	.
143	2010	mCE2	15156	98.7	99.1	6.1	5.8	-0.4	1.5	0.97
144	2011	mCE2	14647	99.7	100.2	5.9	5.5	-0.5	1.5	0.97
145	2012	mCE2	14404	99.9	100.3	5.7	5.4	-0.5	1.7	0.95
146	2013	mCE2	12894	99.8	100.3	5.7	5.3	-0.5	1.9	0.94
147	2014	mCE2	13134	100.4	100.8	5.7	5.4	-0.4	2.0	0.94
148	2015	mCE2	13010	101.2	101.8	5.5	5.2	-0.6	2.0	0.93

JER SS and traditional breeding value for nongenotyped females with phenotype

Obs	BYR	name	no	mean_ss	mean_e	std_ss	std_e	mean_dif	std_dif	corr_SS
149	2016	mCE2	11765	101.2	101.7	5.6	5.4	-0.5	2.1	0.93
150	2017	mCE2	10216	102.3	102.6	5.8	5.4	-0.3	2.0	0.94
151	2018	mCE2	9783	102.5	102.8	5.4	5.1	-0.4	1.8	0.94
152	2019	mCE2	7229	101.2	101.4	5.8	5.5	-0.2	1.8	0.95
153	2020	mCE2	6213	100.7	100.7	6.4	6.5	0.0	2.0	0.95
154	2021	mCE2	1321	99.6	99.0	6.1	6.1	0.6	2.2	0.93
155	2022	mCE2	1	.	.	.	.	.	.	.
156	2010	mCS2	13541	96.3	96.5	5.5	5.5	-0.2	1.2	0.97
157	2011	mCS2	13358	95.5	95.7	5.3	5.3	-0.2	1.3	0.97
158	2012	mCS2	13318	95.5	95.6	4.9	5.0	-0.1	1.4	0.96
159	2013	mCS2	12054	95.4	95.6	4.7	4.7	-0.2	1.6	0.94
160	2014	mCS2	12416	95.7	95.9	5.1	5.1	-0.2	1.7	0.95
161	2015	mCS2	12166	95.7	96.0	5.0	5.0	-0.2	1.8	0.93
162	2016	mCS2	11237	96.6	96.7	4.6	4.6	-0.1	1.7	0.93
163	2017	mCS2	9690	97.2	97.1	4.8	4.8	0.0	1.7	0.94
164	2018	mCS2	9390	96.7	96.7	5.0	5.0	0.0	1.5	0.96
165	2019	mCS2	6979	97.8	97.9	4.6	4.6	-0.1	1.5	0.95
166	2020	mCS2	6024	99.7	99.7	5.3	5.3	0.0	1.5	0.96
167	2021	mCS2	1281	100.4	100.3	5.7	5.6	0.1	1.5	0.97
168	2022	mCS2	1	.	.	.	.	.	.	.
169	2010	brth	10724	94.7	94.3	5.8	5.9	0.4	1.1	0.98
170	2011	brth	10826	94.6	94.4	5.7	5.6	0.2	1.2	0.98
171	2012	brth	10427	96.4	96.3	5.5	5.5	0.0	1.3	0.97
172	2013	brth	10462	96.3	96.3	5.4	5.4	0.0	1.4	0.97
173	2014	brth	10625	96.7	96.7	5.3	5.2	0.0	1.4	0.96
174	2015	brth	9680	96.9	96.9	5.4	5.3	0.0	1.5	0.96
175	2016	brth	9920	97.1	97.4	5.3	5.3	-0.2	1.5	0.96
176	2017	brth	9072	96.7	96.9	5.2	5.2	-0.2	1.5	0.96
177	2018	brth	9352	97.6	97.7	4.8	4.7	-0.2	1.4	0.96
178	2019	brth	9620	97.4	97.6	6.1	6.1	-0.1	1.4	0.98
179	2020	brth	11984	98.7	98.7	5.9	6.0	0.0	1.3	0.97
180	2021	brth	12606	100.9	100.8	6.2	6.2	0.2	1.3	0.98
181	2022	brth	14357	101.4	100.9	6.0	6.1	0.5	1.3	0.98
182	2023	brth	14194	102.7	101.9	6.1	6.3	0.8	1.4	0.98
183	2024	brth	3445	104.4	103.6	6.1	6.4	0.8	1.5	0.97
184	2010	calv	19572	92.8	93.7	6.0	5.8	-0.9	1.5	0.97
185	2011	calv	18841	93.7	94.6	5.9	5.6	-0.9	1.5	0.97

JER SS and traditional breeding value for nongenotyped females with phenotype

Obs	BYR	name	no	mean_ss	mean_e	std_ss	std_e	mean_dif	std_dif	corr_SS
186	2012	calv	18743	94.4	95.2	6.1	5.8	-0.8	1.7	0.96
187	2013	calv	16684	94.4	95.1	5.8	5.4	-0.8	1.9	0.94
188	2014	calv	17212	94.6	95.4	6.0	5.6	-0.8	1.9	0.95
189	2015	calv	16316	96.8	97.7	6.3	5.9	-0.9	2.0	0.95
190	2016	calv	15335	96.5	97.2	6.7	6.3	-0.7	2.0	0.95
191	2017	calv	14281	97.6	98.1	6.3	6.0	-0.4	2.0	0.95
192	2018	calv	15344	99.8	100.2	5.5	5.4	-0.4	1.9	0.94
193	2019	calv	14564	99.6	99.7	5.5	5.3	0.0	1.8	0.94
194	2020	calv	13718	100.1	100.0	6.4	6.4	0.1	1.8	0.96
195	2021	calv	12906	100.2	100.1	6.2	6.1	0.1	2.1	0.94
196	2022	calv	3189	102.3	101.7	5.5	4.9	0.6	2.3	0.91

JER SS and traditional breeding value for nongenotyped females with phenotype

Obs	diff	d_brth	d_calv	p_brth	p_calv
1	-17	.	.	.	.
2	-16	.	.	.	.
3	-15	.	2	.	0
4	-14	.	1	.	0
5	-13	.	6	.	0
6	-12	.	15	.	0
7	-11	.	19	.	0
8	-10	.	67	.	0
9	-9	.	154	.	0
10	-8	3	245	0	0
11	-7	24	627	0	0
12	-6	46	1339	0	1
13	-5	267	1999	0	1
14	-4	917	4747	1	2
15	-3	2337	12652	1	6
16	-2	4514	25819	3	13
17	-1	45532	58038	29	30
18	0	46477	46590	30	24
19	1	37440	22309	24	11
20	2	12892	12974	8	7
21	3	3623	4413	2	2
22	4	1625	2010	1	1
23	5	1003	1506	1	1
24	6	435	634	0	0
25	7	93	273	0	0
26	8	46	134	0	0
27	9	11	84	0	0
28	10	6	23	0	0
29	11	1	14	0	0
30	12	2	10	0	0
31	13	.	.	.	.
32	14	.	1	.	0
33	15	.	.	.	.
34	16	.	.	.	.

JER SS and traditional breeding value for nongenotyped females with phenotype

Obs	diff	d_dSB1	d_dCE1	d_dCS1	d_dSB2	d_dCE2	d_dCS2
1	-17	.	.	.	.	.	.
2	-16	.	.	.	.	.	.
3	-15	.	.	.	.	.	.
4	-14	.	.	.	.	.	.
5	-13	.	.	.	.	.	.
6	-12	.	.	.	.	1	.
7	-11	.	.	.	.	1	1
8	-10	.	2	2	1	6	.
9	-9	1	6	6	2	18	13
10	-8	1	10	11	3	54	28
11	-7	9	33	25	15	95	63
12	-6	51	101	114	67	268	189
13	-5	193	390	283	222	658	492
14	-4	632	1021	811	838	1669	1216
15	-3	1882	2483	1942	2549	3432	2637
16	-2	7570	6785	4928	9488	8349	6460
17	-1	36195	30325	24178	41424	29729	36706
18	0	68321	67878	80038	97327	73056	123999
19	1	29433	25316	17744	58117	67000	23585
20	2	7449	7447	4692	14854	20290	5605
21	3	3275	3126	1984	5582	7499	2269
22	4	1491	1434	863	2699	3502	971
23	5	509	575	281	1091	1821	419
24	6	161	221	92	434	791	159
25	7	83	73	39	178	398	38
26	8	27	21	4	70	186	16
27	9	5	9	4	26	82	1
28	10	2	3	1	13	31	2
29	11	4	.	.	4	13	1
30	12	.	.	.	2	8	.
31	13	.	.	.	2	2	.
32	14	.	.	.	.	1	.
33	15	.	.	.	.	1	.
34	16	.	.	.	.	.	.

JER SS and traditional breeding value for nongenotyped females with phenotype

Obs	diff	d_mSB1	d_mCE1	d_mCS1	d_mSB2	d_mCE2	d_mCS2
1	-17	.	.	.	1	.	.
2	-16	1	.	.	2	.	.
3	-15	1	.	.	4	.	.
4	-14	1	2	.	4	2	.
5	-13	4	1	.	8	1	.
6	-12	10	7	.	37	14	1
7	-11	21	14	1	61	15	1
8	-10	58	45	7	109	51	6
9	-9	77	78	26	174	99	25
10	-8	173	230	73	317	197	58
11	-7	428	442	160	658	384	147
12	-6	919	964	446	1129	797	322
13	-5	1809	2043	1035	2173	1525	803
14	-4	3674	3986	2433	3718	2892	1627
15	-3	8558	8644	5352	6649	5479	3315
16	-2	22090	21887	13253	14764	12842	7376
17	-1	63235	67580	50804	35951	35442	28147
18	0	54913	46622	60589	35516	41678	50833
19	1	23770	18337	20816	17317	15228	16906
20	2	8898	7055	7674	8411	6290	6365
21	3	4170	3208	3496	4348	3202	3029
22	4	1949	1668	1791	2424	1768	1380
23	5	1026	850	673	1297	920	647
24	6	504	388	307	739	499	279
25	7	240	183	111	406	237	106
26	8	90	67	35	259	109	44
27	9	51	33	11	110	55	22
28	10	24	13	4	75	25	11
29	11	9	4	3	33	12	3
30	12	1	3	.	15	4	1
31	13	1	1	1	6	4	1
32	14	.	.	1	6	2	.
33	15	.	.	.	2	.	.
34	16	.	.	.	1	.	.

JER SS and traditional breeding value for nongenotyped females with phenotype

Obs	diff	p_dSB1	p_dCE1	p_dCS1	p_dSB2	p_dCE2	p_dCS2
1	-17	.	.	.	.	.	.
2	-16	.	.	.	.	.	.
3	-15	.	.	.	.	.	.
4	-14	.	.	.	.	.	.
5	-13	.	.	.	.	.	.
6	-12	.	.	.	.	0	.
7	-11	.	.	.	.	0	0
8	-10	.	0	0	0	0	.
9	-9	0	0	0	0	0	0
10	-8	0	0	0	0	0	0
11	-7	0	0	0	0	0	0
12	-6	0	0	0	0	0	0
13	-5	0	0	0	0	0	0
14	-4	0	1	1	0	1	1
15	-3	1	2	1	1	2	1
16	-2	5	5	4	4	4	3
17	-1	23	21	18	18	14	18
18	0	43	46	58	41	33	61
19	1	19	17	13	25	31	12
20	2	5	5	3	6	9	3
21	3	2	2	1	2	3	1
22	4	1	1	1	1	2	0
23	5	0	0	0	0	1	0
24	6	0	0	0	0	0	0
25	7	0	0	0	0	0	0
26	8	0	0	0	0	0	0
27	9	0	0	0	0	0	0
28	10	0	0	0	0	0	0
29	11	0	.	.	0	0	0
30	12	.	.	.	0	0	.
31	13	.	.	.	0	0	.
32	14	.	.	.	.	0	.
33	15	.	.	.	.	0	.
34	16	.	.	.	.	.	.

JER SS and traditional breeding value for nongenotyped females with phenotype

Obs	diff	p_mSB1	p_mCE1	p_mCS1	p_mSB2	p_mCE2	p_mCS2
1	-17	.	.	.	0	.	.
2	-16	0	.	.	0	.	.
3	-15	0	.	.	0	.	.
4	-14	0	0	.	0	0	.
5	-13	0	0	.	0	0	.
6	-12	0	0	.	0	0	0
7	-11	0	0	0	0	0	0
8	-10	0	0	0	0	0	0
9	-9	0	0	0	0	0	0
10	-8	0	0	0	0	0	0
11	-7	0	0	0	0	0	0
12	-6	0	1	0	1	1	0
13	-5	1	1	1	2	1	1
14	-4	2	2	1	3	2	1
15	-3	4	5	3	5	4	3
16	-2	11	12	8	11	10	6
17	-1	32	37	30	26	27	23
18	0	28	25	36	26	32	42
19	1	12	10	12	13	12	14
20	2	5	4	5	6	5	5
21	3	2	2	2	3	2	2
22	4	1	1	1	2	1	1
23	5	1	0	0	1	1	1
24	6	0	0	0	1	0	0
25	7	0	0	0	0	0	0
26	8	0	0	0	0	0	0
27	9	0	0	0	0	0	0
28	10	0	0	0	0	0	0
29	11	0	0	0	0	0	0
30	12	0	0	.	0	0	0
31	13	0	0	0	0	0	0
32	14	.	.	0	0	0	.
33	15	.	.	.	0	.	.
34	16	.	.	.	0	.	.

JER SS and traditional breeding value for nordic AI bulls with minimum 15 offspring

Obs	BYR	name	no	mean_noff	std_noff	mean_ss	mean_e	std_ss	std_e	mean_dif	std_dif	corr_SS
1	2010	dSB1	55	156	188	96.9	98.4	8.0	7.8	-1.6	2.4	0.95
2	2011	dSB1	47	137	158	95.4	97.1	8.4	8.9	-1.7	2.5	0.96
3	2012	dSB1	47	272	522	97.4	98.1	7.4	7.9	-0.7	2.7	0.94
4	2013	dSB1	50	218	498	95.5	96.2	8.3	8.7	-0.7	2.6	0.96
5	2014	dSB1	36	391	557	98.3	99.4	6.8	7.6	-1.1	1.9	0.97
6	2015	dSB1	30	877	858	98.1	98.9	6.8	6.8	-0.9	1.4	0.98
7	2016	dSB1	26	517	580	99.2	99.7	8.8	9.0	-0.5	2.2	0.97
8	2017	dSB1	29	970	827	99.6	99.7	8.9	9.1	-0.1	1.2	0.99
9	2018	dSB1	20	660	866	99.4	99.0	6.8	6.7	0.4	1.4	0.98
10	2019	dSB1	29	995	760	103.5	102.4	12.0	12.7	1.1	1.8	0.99
11	2020	dSB1	24	913	760	101.0	98.7	10.4	12.3	2.3	3.2	0.98
12	2021	dSB1	14	515	511	106.2	104.9	8.7	8.9	1.4	2.2	0.97
13	2010	dCE1	55	150	184	97.4	98.3	8.2	8.6	-0.9	3.0	0.94
14	2011	dCE1	47	135	163	95.8	97.1	8.0	8.4	-1.3	2.8	0.94
15	2012	dCE1	47	263	512	99.6	100.0	8.7	9.0	-0.3	2.4	0.96
16	2013	dCE1	50	210	486	95.3	95.0	8.4	8.8	0.3	3.4	0.92
17	2014	dCE1	36	378	543	101.5	101.7	7.6	7.9	-0.2	3.0	0.93
18	2015	dCE1	30	844	834	102.0	101.9	9.2	9.2	0.1	2.1	0.97
19	2016	dCE1	26	490	554	98.8	98.8	7.4	7.4	0.1	2.7	0.93
20	2017	dCE1	29	924	783	100.4	100.6	8.3	8.6	-0.1	1.6	0.98
21	2018	dCE1	20	631	829	99.7	100.1	7.4	6.9	-0.4	2.8	0.93
22	2019	dCE1	29	939	723	98.8	98.8	7.6	7.4	0.0	1.8	0.97
23	2020	dCE1	23	880	698	99.7	98.5	6.3	7.4	1.2	2.6	0.94
24	2021	dCE1	14	467	461	106.1	106.3	5.5	6.0	-0.2	2.2	0.93
25	2010	dCS1	55	116	143	97.3	97.1	6.3	6.4	0.2	1.2	0.98
26	2011	dCS1	47	107	118	99.3	99.5	7.6	7.6	-0.1	1.7	0.98
27	2012	dCS1	47	220	422	98.4	98.2	6.9	6.7	0.2	1.5	0.98
28	2013	dCS1	50	186	415	99.2	99.1	7.2	7.2	0.1	1.6	0.97
29	2014	dCS1	36	333	466	95.8	96.2	6.3	6.6	-0.4	1.3	0.98
30	2015	dCS1	30	715	688	98.3	98.2	5.7	5.9	0.1	1.4	0.97
31	2016	dCS1	25	472	513	100.6	101.0	5.6	5.5	-0.4	1.7	0.95
32	2017	dCS1	29	802	681	101.3	101.4	6.1	6.0	0.0	0.9	0.99
33	2018	dCS1	20	588	776	101.3	101.0	4.0	3.9	0.4	1.3	0.95
34	2019	dCS1	29	826	623	103.6	103.0	4.4	4.6	0.6	1.1	0.97
35	2020	dCS1	22	852	637	100.7	100.6	5.0	5.2	0.1	1.0	0.98
36	2021	dCS1	14	440	432	102.4	102.5	5.0	6.5	-0.1	2.1	0.97
37	2010	dSB2	55	395	389	96.0	97.1	8.7	8.8	-1.1	2.6	0.96

JER SS and traditional breeding value for nordic AI bulls with minimum 15 offspring

Obs	BYR	name	no	mean_noff	std_noff	mean_ss	mean_e	std_ss	std_e	mean_dif	std_dif	corr_SS
38	2011	dSB2	48	320	262	93.3	94.7	8.6	9.4	-1.4	2.3	0.97
39	2012	dSB2	47	593	976	96.0	96.1	7.6	8.9	-0.2	2.9	0.95
40	2013	dSB2	51	457	692	93.5	93.3	9.9	10.3	0.2	2.7	0.97
41	2014	dSB2	37	750	823	95.4	96.0	6.8	7.3	-0.6	2.2	0.95
42	2015	dSB2	30	1666	1422	97.1	98.0	7.1	7.2	-0.9	1.3	0.98
43	2016	dSB2	26	1086	989	95.6	95.8	9.9	10.7	-0.2	2.4	0.98
44	2017	dSB2	29	1665	1218	101.0	101.1	8.8	8.9	-0.2	1.1	0.99
45	2018	dSB2	20	919	1041	99.6	99.6	8.3	8.8	-0.1	1.6	0.98
46	2019	dSB2	31	1212	958	102.3	101.0	13.3	14.6	1.3	2.4	0.99
47	2020	dSB2	25	901	792	102.0	99.8	12.1	14.2	2.2	3.1	0.99
48	2021	dSB2	12	554	455	107.1	106.7	9.5	10.0	0.4	2.8	0.96
49	2010	dCE2	55	382	389	99.0	99.0	9.0	9.6	0.0	3.1	0.95
50	2011	dCE2	47	315	274	96.6	97.0	8.2	9.3	-0.4	3.2	0.94
51	2012	dCE2	47	571	967	99.2	98.6	9.0	9.3	0.6	2.3	0.97
52	2013	dCE2	51	435	678	96.0	95.2	9.2	9.5	0.8	3.6	0.93
53	2014	dCE2	37	714	789	100.0	100.3	7.8	7.9	-0.3	3.2	0.92
54	2015	dCE2	30	1598	1390	101.3	101.7	7.5	7.6	-0.4	1.9	0.97
55	2016	dCE2	26	1025	949	97.8	97.8	7.8	8.6	0.0	2.5	0.96
56	2017	dCE2	29	1595	1173	99.6	100.0	10.4	10.9	-0.4	1.6	0.99
57	2018	dCE2	20	868	999	99.9	100.2	10.0	9.9	-0.3	3.3	0.94
58	2019	dCE2	31	1146	930	98.3	97.7	9.8	10.5	0.6	2.7	0.97
59	2020	dCE2	25	840	738	97.6	96.6	10.8	11.9	1.1	3.4	0.96
60	2021	dCE2	12	512	419	104.0	105.3	6.7	6.8	-1.3	2.6	0.93
61	2010	dCS2	55	299	289	98.2	98.0	6.0	6.1	0.3	1.2	0.98
62	2011	dCS2	47	250	178	99.7	99.2	7.6	7.4	0.5	1.2	0.99
63	2012	dCS2	47	483	782	98.8	98.6	7.2	7.1	0.2	1.0	0.99
64	2013	dCS2	51	392	574	99.0	98.8	7.0	7.0	0.2	1.4	0.98
65	2014	dCS2	37	646	693	96.3	96.6	6.7	7.0	-0.2	1.1	0.99
66	2015	dCS2	30	1362	1122	97.7	97.6	6.0	6.3	0.0	0.6	1.00
67	2016	dCS2	26	957	874	99.5	99.6	6.7	6.6	0.0	0.7	0.99
68	2017	dCS2	29	1371	983	101.1	101.1	6.5	6.4	0.0	0.7	0.99
69	2018	dCS2	20	796	924	98.8	98.4	4.2	4.0	0.4	1.0	0.97
70	2019	dCS2	31	969	763	103.1	102.6	4.9	4.8	0.4	1.1	0.98
71	2020	dCS2	24	791	661	101.7	101.4	4.8	4.7	0.3	0.8	0.99
72	2021	dCS2	12	480	393	101.5	100.9	4.2	4.1	0.6	1.2	0.96
73	2010	mSB1	55	168	178	93.1	94.3	9.2	8.4	-1.2	3.4	0.93
74	2011	mSB1	47	142	156	90.8	91.1	8.7	8.4	-0.3	3.0	0.94

JER SS and traditional breeding value for nordic AI bulls with minimum 15 offspring

Obs	BYR	name	no	mean_noff	std_noff	mean_ss	mean_e	std_ss	std_e	mean_dif	std_dif	corr_SS
75	2012	mSB1	47	296	546	94.5	95.0	11.5	11.6	-0.5	3.0	0.97
76	2013	mSB1	50	226	437	95.3	96.3	8.2	8.3	-1.0	2.9	0.94
77	2014	mSB1	36	395	505	94.9	94.7	9.3	9.3	0.3	2.6	0.96
78	2015	mSB1	30	960	952	101.4	101.0	7.0	7.5	0.4	3.2	0.91
79	2016	mSB1	26	654	687	99.5	98.7	8.4	9.4	0.7	3.5	0.93
80	2017	mSB1	29	989	787	100.7	100.2	9.0	8.9	0.5	2.2	0.97
81	2018	mSB1	20	636	841	97.9	96.9	10.7	10.6	1.1	2.5	0.97
82	2019	mSB1	29	581	583	104.3	103.2	7.9	7.2	1.1	2.5	0.95
83	2010	mCE1	55	163	176	94.4	95.1	9.3	9.3	-0.7	3.4	0.93
84	2011	mCE1	47	139	161	95.1	96.5	8.7	9.0	-1.4	3.5	0.92
85	2012	mCE1	47	285	534	96.9	97.2	9.0	9.9	-0.3	3.3	0.94
86	2013	mCE1	50	216	423	96.7	98.0	9.6	10.2	-1.3	3.3	0.94
87	2014	mCE1	36	375	483	97.4	97.1	8.3	8.8	0.3	2.5	0.96
88	2015	mCE1	30	920	926	103.6	103.5	5.7	6.5	0.1	2.0	0.95
89	2016	mCE1	26	620	655	99.6	99.6	6.8	8.2	0.0	2.8	0.95
90	2017	mCE1	29	927	733	102.6	102.2	6.8	6.4	0.4	1.7	0.97
91	2018	mCE1	20	594	795	99.2	97.4	5.6	5.6	1.9	3.2	0.83
92	2019	mCE1	29	534	539	104.7	103.9	5.3	5.9	0.8	2.5	0.90
93	2010	mCS1	55	135	145	99.7	99.4	6.8	6.7	0.3	3.0	0.90
94	2011	mCS1	47	116	115	95.7	96.6	8.5	8.8	-0.9	3.5	0.92
95	2012	mCS1	47	245	439	97.0	97.9	7.9	7.5	-0.9	3.3	0.91
96	2013	mCS1	50	190	351	97.3	97.7	5.8	5.9	-0.4	3.1	0.86
97	2014	mCS1	36	336	419	95.6	95.9	8.2	9.1	-0.3	3.1	0.94
98	2015	mCS1	30	802	777	98.9	99.0	7.5	7.3	-0.2	1.8	0.97
99	2016	mCS1	26	585	615	100.0	100.3	5.9	5.6	-0.3	1.5	0.97
100	2017	mCS1	29	824	653	99.7	99.3	6.9	6.8	0.4	2.0	0.96
101	2018	mCS1	20	562	754	101.8	100.9	6.6	7.2	1.0	2.9	0.92
102	2019	mCS1	29	504	503	99.4	99.1	6.3	6.3	0.3	2.6	0.92
103	2010	mSB2	55	136	150	95.3	96.5	8.1	8.5	-1.2	4.3	0.87
104	2011	mSB2	47	115	134	96.5	97.1	9.5	9.2	-0.7	5.4	0.83
105	2012	mSB2	47	231	406	97.4	98.0	9.6	9.5	-0.7	4.2	0.90
106	2013	mSB2	50	180	335	97.4	98.4	9.0	8.6	-1.0	4.2	0.89
107	2014	mSB2	36	313	398	95.1	96.1	10.6	10.0	-1.0	2.8	0.96
108	2015	mSB2	30	678	638	99.4	98.7	8.4	9.6	0.7	3.3	0.94
109	2016	mSB2	26	418	444	98.9	98.3	12.2	13.0	0.6	3.5	0.96
110	2017	mSB2	29	454	372	100.4	99.6	10.1	9.9	0.8	3.2	0.95
111	2018	mSB2	14	332	373	98.1	98.0	13.3	14.5	0.1	4.0	0.96

JER SS and traditional breeding value for nordic AI bulls with minimum 15 offspring

Obs	BYR	name	no	mean_noff	std_noff	mean_ss	mean_e	std_ss	std_e	mean_dif	std_dif	corr_SS
112	2010	mCE2	55	132	147	98.6	99.4	8.1	8.1	-0.8	3.5	0.91
113	2011	mCE2	47	112	135	101.1	101.8	7.3	7.4	-0.7	3.8	0.87
114	2012	mCE2	47	223	396	99.3	100.0	8.1	8.5	-0.7	2.9	0.94
115	2013	mCE2	50	173	325	101.6	102.5	8.7	8.6	-0.8	3.9	0.90
116	2014	mCE2	36	300	384	100.8	100.7	8.3	8.5	0.1	3.1	0.93
117	2015	mCE2	30	653	620	103.9	103.9	6.7	7.4	-0.1	2.8	0.93
118	2016	mCE2	26	393	420	100.3	101.0	8.9	8.4	-0.7	3.2	0.93
119	2017	mCE2	29	427	346	102.8	101.8	8.9	8.0	1.0	3.1	0.94
120	2018	mCE2	13	334	353	98.1	96.8	8.9	10.6	1.3	4.2	0.92
121	2010	mCS2	55	113	122	97.0	97.1	7.3	7.2	-0.1	3.2	0.90
122	2011	mCS2	47	94	94	94.1	94.0	8.9	9.0	0.1	3.2	0.93
123	2012	mCS2	47	193	327	96.3	96.9	7.1	6.6	-0.5	3.3	0.89
124	2013	mCS2	50	153	270	95.7	95.7	6.6	6.4	0.0	3.1	0.89
125	2014	mCS2	36	269	336	96.8	96.9	7.1	7.7	-0.2	2.8	0.93
126	2015	mCS2	30	563	507	98.8	97.9	6.7	6.9	0.9	2.1	0.95
127	2016	mCS2	25	385	397	99.8	98.9	6.7	6.7	0.9	1.7	0.97
128	2017	mCS2	29	386	319	99.0	99.1	7.1	6.9	-0.1	2.0	0.96
129	2018	mCS2	12	347	342	104.2	104.3	8.2	7.6	-0.1	2.6	0.95
130	2010	brth	55	156	188	96.4	97.8	8.4	8.3	-1.4	2.6	0.95
131	2011	brth	47	137	158	94.3	96.0	8.1	8.9	-1.7	2.4	0.96
132	2012	brth	47	272	522	96.9	97.4	7.5	8.5	-0.5	3.0	0.94
133	2013	brth	50	218	498	94.1	94.4	9.3	9.8	-0.2	2.7	0.96
134	2014	brth	36	391	557	97.2	98.1	6.7	7.3	-0.9	1.9	0.97
135	2015	brth	30	877	858	98.2	99.1	6.8	6.9	-0.9	1.4	0.98
136	2016	brth	26	517	580	97.7	97.9	9.3	9.7	-0.2	2.0	0.98
137	2017	brth	29	970	827	100.1	100.3	9.3	9.5	-0.2	1.0	0.99
138	2018	brth	20	660	866	99.4	99.3	8.1	7.7	0.1	1.4	0.99
139	2019	brth	29	995	760	102.9	101.8	12.7	13.5	1.1	2.0	0.99
140	2020	brth	24	913	760	101.0	98.6	11.5	13.7	2.5	3.5	0.98
141	2021	brth	14	515	511	106.9	105.9	8.5	9.4	1.0	2.3	0.97
142	2010	calv	55	168	178	93.5	94.9	8.7	8.3	-1.4	3.4	0.92
143	2011	calv	47	142	156	93.2	94.0	9.5	8.8	-0.8	3.9	0.91
144	2012	calv	47	296	546	95.6	96.3	10.2	10.2	-0.7	3.1	0.95
145	2013	calv	50	226	437	96.2	97.5	8.6	8.4	-1.3	2.8	0.94
146	2014	calv	36	395	505	95.2	95.3	10.0	9.9	0.0	2.5	0.97
147	2015	calv	30	960	952	101.5	101.0	6.7	7.7	0.5	2.8	0.94
148	2016	calv	26	654	687	99.2	98.9	9.8	10.9	0.3	3.4	0.95

JER SS and traditional breeding value for nordic AI bulls with minimum 15 offspring

Obs	BYR	name	no	mean_noff	std_noff	mean_ss	mean_e	std_ss	std_e	mean_dif	std_dif	corr_SS
149	2017	calv	29	989	787	101.4	100.4	9.1	8.7	1.0	2.4	0.96
150	2018	calv	20	636	841	97.3	96.9	10.8	10.7	0.4	2.5	0.97
151	2019	calv	29	581	583	104.5	103.3	7.4	6.7	1.1	3.3	0.90

JER SS and traditional breeding value for nordic AI bulls with minimum 15 offspring

Obs	diff	d_brth	d_calv	p_brth	p_calv
1	-13	.	.	.	.
2	-12	.	.	.	.
3	-11	.	.	.	.
4	-10	1	.	0	.
5	-9	.	2	.	1
6	-8	.	4	.	1
7	-7	3	5	1	1
8	-6	5	10	1	3
9	-5	10	15	2	4
10	-4	20	21	5	6
11	-3	29	27	7	7
12	-2	40	37	10	10
13	-1	102	48	25	13
14	0	59	64	14	17
15	1	55	44	13	12
16	2	47	38	11	10
17	3	21	15	5	4
18	4	6	14	1	4
19	5	4	12	1	3
20	6	1	7	0	2
21	7	2	5	0	1
22	8	1	1	0	0
23	9	1	3	0	1
24	10	.	.	.	.
25	11	1	.	0	.
26	12	.	.	.	.
27	13	.	.	.	.
28	14	1	.	0	.

JER SS and traditional breeding value for nordic AI bulls with minimum 15 offspring

Obs	diff	d_dSB1	d_dCE1	d_dCS1	d_dSB2	d_dCE2	d_dCS2
1	-13	.	.	.	.	.	.
2	-12	.	.	.	.	.	.
3	-11	.	.	.	.	.	.
4	-10	1	1	.	.	1	.
5	-9	.	.	.	.	1	.
6	-8	.	2	.	2	3	.
7	-7	2	6	.	.	3	.
8	-6	6	9	2	1	8	.
9	-5	12	7	.	15	5	1
10	-4	21	14	.	16	12	.
11	-3	29	23	13	21	23	2
12	-2	53	38	33	58	40	18
13	-1	75	71	70	73	71	56
14	0	75	95	161	92	80	202
15	1	70	67	77	55	61	88
16	2	32	27	33	31	32	30
17	3	18	18	9	22	27	11
18	4	3	13	5	10	21	1
19	5	4	6	3	6	7	.
20	6	4	4	.	2	6	.
21	7	1	3	.	5	2	.
22	8	1	1	.	1	3	.
23	9	1	2	.	2	4	.
24	10	.	1	.	.	.	.
25	11	.	.	.	.	.	.
26	12	.	.	.	.	1	.
27	13	.	.	.	1	.	.
28	14	1	.	.	.	.	.

JER SS and traditional breeding value for nordic AI bulls with minimum 15 offspring

Obs	diff	d_mSB1	d_mCE1	d_mCS1	d_mSB2	d_mCE2	d_mCS2
1	-13	.	.	.	1	.	.
2	-12	.	.	.	1	.	.
3	-11	.	1	.	.	1	.
4	-10	.	.	1	3	2	.
5	-9	.	2	4	9	4	1
6	-8	5	5	1	7	6	3
7	-7	4	5	3	9	5	1
8	-6	6	4	7	8	4	9
9	-5	13	16	14	10	10	8
10	-4	24	21	11	24	25	13
11	-3	20	23	18	28	19	21
12	-2	32	32	41	37	32	23
13	-1	54	50	53	30	51	49
14	0	67	64	78	38	52	66
15	1	42	52	57	30	39	67
16	2	38	42	37	34	31	23
17	3	27	16	17	20	24	17
18	4	18	12	11	14	14	12
19	5	12	15	7	13	7	12
20	6	4	7	5	10	2	9
21	7	2	3	2	6	7	2
22	8	2	1	3	3	1	1
23	9	1	1	.	1	3	1
24	10	.	.	.	3	1	.
25	11	.	.	1	2	.	.
26	12	1	.	.	.	.	.
27	13	.	.	.	.	.	.
28	14	.	.	.	.	.	.

JER SS and traditional breeding value for nordic AI bulls with minimum 15 offspring

Obs	diff	p_dSB1	p_dCE1	p_dCS1	p_dSB2	p_dCE2	p_dCS2
1	-13	.	.	.	.	.	.
2	-12	.	.	.	.	.	.
3	-11	.	.	.	.	.	.
4	-10	0	0	.	.	0	.
5	-9	.	.	.	.	0	.
6	-8	.	0	.	0	1	.
7	-7	0	1	.	.	1	.
8	-6	1	2	0	0	2	.
9	-5	3	2	.	4	1	0
10	-4	5	3	.	4	3	.
11	-3	7	6	3	5	6	0
12	-2	13	9	8	14	10	4
13	-1	18	17	17	18	17	14
14	0	18	23	40	22	19	49
15	1	17	16	19	13	15	22
16	2	8	7	8	8	8	7
17	3	4	4	2	5	7	3
18	4	1	3	1	2	5	0
19	5	1	1	1	1	2	.
20	6	1	1	.	0	1	.
21	7	0	1	.	1	0	.
22	8	0	0	.	0	1	.
23	9	0	0	.	0	1	.
24	10	.	0	.	.	.	.
25	11	.	.	.	.	.	.
26	12	.	.	.	.	0	.
27	13	.	.	.	0	.	.
28	14	0	.	.	.	.	.

JER SS and traditional breeding value for nordic AI bulls with minimum 15 offspring

Obs	diff	p_mSB1	p_mCE1	p_mCS1	p_mSB2	p_mCE2	p_mCS2
1	-13	.	.	.	0	.	.
2	-12	.	.	.	0	.	.
3	-11	.	0	.	.	0	.
4	-10	.	.	0	1	1	.
5	-9	.	1	1	3	1	0
6	-8	1	1	0	2	2	1
7	-7	1	1	1	3	1	0
8	-6	2	1	2	2	1	3
9	-5	3	4	4	3	3	2
10	-4	6	6	3	7	7	4
11	-3	5	6	5	8	6	6
12	-2	9	9	11	11	9	7
13	-1	15	13	14	9	15	14
14	0	18	17	21	11	15	20
15	1	11	14	15	9	11	20
16	2	10	11	10	10	9	7
17	3	7	4	5	6	7	5
18	4	5	3	3	4	4	4
19	5	3	4	2	4	2	4
20	6	1	2	1	3	1	3
21	7	1	1	1	2	2	1
22	8	1	0	1	1	0	0
23	9	0	0	.	0	1	0
24	10	.	.	.	1	0	.
25	11	.	.	0	1	.	.
26	12	0	.	.	.	.	.
27	13	.	.	.	.	.	.
28	14	.	.	.	.	.	.

JER SS and twostep breeding value for genotyped females without phenotype

Obs	BYR	name	no	mean_ss	mean_two	std_ss	std_two	mean_dif	std_dif	corr_SS
1	2019	brth	8713	99.0	100.7	6.4	3.6	-1.7	4.1	0.79
2	2020	brth	9584	99.9	100.6	6.6	3.5	-0.7	4.3	0.80
3	2021	brth	9375	102.9	101.3	6.5	3.5	1.6	4.3	0.80
4	2022	brth	9190	103.3	100.9	6.2	2.7	2.4	4.3	0.81
5	2023	brth	8061	103.6	101.1	6.1	2.5	2.5	4.4	0.80
6	2024	brth	557	105.2	101.8	6.3	2.8	3.4	4.6	0.73
7	2019	calv	5454	98.9	99.7	7.1	5.4	-0.8	5.1	0.69
8	2020	calv	7815	99.7	100.7	8.1	6.3	-1.0	5.4	0.74
9	2021	calv	7483	100.3	101.7	7.6	5.6	-1.4	5.2	0.73
10	2022	calv	14372	102.5	102.6	6.9	5.5	-0.1	5.2	0.67
11	2023	calv	14222	101.2	101.7	6.7	5.9	-0.5	5.4	0.64
12	2024	calv	997	102.6	103.3	6.9	5.0	-0.6	5.4	0.64

JER SS and twostep breeding value for genotyped females without phenotype

Obs	diff	d_brth	d_calv	p_brth	p_calv
1	-25	.	1	.	0
2	-22	1	5	0	0
3	-21	1	.	0	.
4	-20	.	5	.	0
5	-19	2	8	0	0
6	-18	5	22	0	0
7	-17	7	34	0	0
8	-16	10	58	0	0
9	-15	22	89	0	0
10	-14	33	160	0	0
11	-13	54	263	0	1
12	-12	116	350	0	1
13	-11	172	555	0	1
14	-10	275	796	1	2
15	-9	411	1083	1	2
16	-8	679	1443	1	3
17	-7	923	1862	2	4
18	-6	1376	2201	3	4
19	-5	1761	2703	4	5
20	-4	2162	3089	5	6
21	-3	2700	3446	6	7
22	-2	3216	3659	7	7
23	-1	3503	3814	8	8
24	0	3591	3749	8	7
25	1	3924	3672	9	7
26	2	3877	3325	9	7
27	3	3653	2987	8	6
28	4	3282	2578	7	5
29	5	2685	2128	6	4
30	6	2115	1752	5	3
31	7	1667	1299	4	3
32	8	1261	1059	3	2
33	9	815	749	2	1
34	10	535	489	1	1
35	11	300	350	1	1
36	12	177	209	0	0
37	13	86	134	0	0

JER SS and twostep breeding value for genotyped females without phenotype

Obs	diff	d_brth	d_calv	p_brth	p_calv
38	14	45	90	0	0
39	15	18	47	0	0
40	16	15	34	0	0
41	17	5	17	0	0
42	18	.	15	.	0
43	19	.	9	.	0
44	20	.	3	.	0
45	22	.	2	.	0

JER SS and twostep breeding value for genotyped females with phenotype

Obs	BYR	name	no	mean_ss	mean_two	std_ss	std_two	mean_dif	std_dif	corr_SS
1	2015	brth	2043	98.6	101.0	5.5	3.5	-2.4	3.7	0.75
2	2016	brth	2467	98.6	101.1	5.9	3.5	-2.5	3.9	0.78
3	2017	brth	2932	98.6	100.8	5.6	3.5	-2.1	3.7	0.77
4	2018	brth	3569	99.6	100.9	5.1	3.3	-1.3	3.5	0.73
5	2019	brth	4456	99.3	100.5	6.5	3.9	-1.2	4.0	0.81
6	2020	brth	6359	100.8	100.7	6.3	3.7	0.0	4.0	0.80
7	2021	brth	6055	103.5	101.5	6.4	3.8	2.0	4.0	0.80
8	2022	brth	7026	104.2	101.0	6.1	2.6	3.3	4.3	0.81
9	2023	brth	6161	105.5	101.5	6.2	2.5	4.0	4.4	0.82
10	2024	brth	440	105.8	101.8	6.1	2.5	4.0	4.6	0.74
11	2015	calv	3548	97.4	97.1	7.7	6.0	0.3	5.1	0.75
12	2016	calv	3995	96.7	96.2	8.2	6.2	0.5	5.2	0.77
13	2017	calv	5271	98.2	98.1	7.6	6.0	0.1	5.1	0.74
14	2018	calv	6790	100.2	100.0	7.1	5.5	0.2	5.0	0.72
15	2019	calv	7715	99.9	100.3	7.2	5.8	-0.3	5.2	0.70
16	2020	calv	8128	100.4	101.4	8.1	6.3	-1.0	5.5	0.74
17	2021	calv	7947	100.9	102.3	7.9	5.7	-1.4	5.3	0.74
18	2022	calv	1844	103.3	103.0	7.5	5.6	0.3	5.4	0.69

JER SS and twostep breeding value for genotyped females with phenotype

Obs	diff	d_brth	d_calv	p_brth	p_calv
1	-25	.	1	.	0
2	-24	.	1	.	0
3	-22	.	1	.	0
4	-21	.	4	.	0
5	-20	.	11	.	0
6	-19	.	9	.	0
7	-18	2	25	0	0
8	-17	2	33	0	0
9	-16	6	50	0	0
10	-15	11	108	0	0
11	-14	20	145	0	0
12	-13	44	204	0	0
13	-12	68	319	0	1
14	-11	163	483	0	1
15	-10	213	632	1	1
16	-9	353	855	1	2
17	-8	592	1125	1	2
18	-7	888	1401	2	3
19	-6	1204	1826	3	4
20	-5	1662	2277	4	5
21	-4	2176	2668	5	6
22	-3	2651	2886	6	6
23	-2	3057	3351	7	7
24	-1	3306	3366	8	7
25	0	3391	3485	8	8
26	1	3463	3399	8	8
27	2	3361	3232	8	7
28	3	3101	2884	7	6
29	4	2812	2511	7	6
30	5	2326	2112	6	5
31	6	1853	1669	4	4
32	7	1454	1323	4	3
33	8	1142	947	3	2
34	9	847	676	2	1
35	10	533	451	1	1
36	11	358	274	1	1
37	12	207	189	0	0

JER SS and twostep breeding value for genotyped females with phenotype

Obs	diff	d_brth	d_calv	p_brth	p_calv
38	13	103	125	0	0
39	14	83	82	0	0
40	15	34	45	0	0
41	16	15	25	0	0
42	17	4	13	0	0
43	18	3	8	0	0
44	19	.	4	.	0
45	20	.	2	.	0
46	23	.	1	.	0

JER SS and twostep breeding value for nordic AI bulls with minimum 15 offspring

Obs	BYR	name	no	mean_noff	std_noff	mean_ss	mean_two	std_ss	std_two	mean_dif	std_dif	corr_SS
1	2010	brth	55	156	188	96.4	100.3	8.4	6.6	-3.9	3.1	0.94
2	2011	brth	47	137	158	94.3	99.2	8.1	6.7	-4.8	2.7	0.95
3	2012	brth	47	272	522	96.9	100.6	7.5	6.0	-3.7	2.7	0.94
4	2013	brth	50	218	498	94.1	97.9	9.3	7.3	-3.7	3.5	0.94
5	2014	brth	36	391	557	97.2	101.0	6.7	5.3	-3.7	2.7	0.93
6	2015	brth	30	877	858	98.2	100.6	6.8	6.6	-2.4	1.8	0.97
7	2016	brth	26	517	580	97.7	99.9	9.3	7.0	-2.5	4.6	0.88
8	2017	brth	29	970	827	100.1	101.3	9.3	8.6	-1.1	2.0	0.98
9	2018	brth	20	660	866	99.4	100.4	8.1	5.7	-1.0	3.9	0.89
10	2019	brth	29	995	760	102.9	101.6	12.7	10.4	1.4	2.9	0.99
11	2020	brth	24	913	760	101.0	102.0	11.5	7.6	-0.9	6.4	0.85
12	2021	brth	14	515	511	106.9	104.4	8.5	7.4	2.4	6.6	0.66
13	2022	brth	2	35	13	100.0	99.6	17.0	1.1	0.4	18.1	-1.00
14	2010	calv	55	168	178	93.5	93.5	8.7	8.1	0.0	3.6	0.91
15	2011	calv	47	142	156	93.2	93.0	9.5	8.1	0.2	3.3	0.94
16	2012	calv	47	296	546	95.6	95.1	10.2	9.5	0.4	3.8	0.93
17	2013	calv	50	226	437	96.2	95.9	8.6	8.5	0.3	3.3	0.93
18	2014	calv	36	395	505	95.2	96.1	10.0	8.8	-0.9	3.5	0.94
19	2015	calv	30	960	952	101.5	101.8	6.7	7.1	-0.4	3.6	0.87
20	2016	calv	26	654	687	99.2	99.8	9.8	8.6	-0.5	3.2	0.95
21	2017	calv	29	989	787	101.4	102.9	9.1	7.6	-1.2	5.4	0.81
22	2018	calv	20	636	841	97.3	100.7	10.8	8.8	-3.4	4.5	0.91
23	2019	calv	29	581	583	104.5	106.1	7.4	4.7	-1.6	4.8	0.77
24	2020	calv	3	76	95	106.7	109.5	3.2	4.0	-2.8	2.0	0.87

JER SS and twostep breeding value for nordic AI bulls with minimum 15 offspring

Obs	diff	d_brth	d_calv	p_brth	p_calv
1	.	2	2	.	.
2	-24	1	.	0	.
3	-23	1	.	0	.
4	-19	1	.	0	.
5	-15	1	.	0	.
6	-13	3	1	1	0
7	-12	4	1	1	0
8	-11	1	1	0	0
9	-10	3	3	1	1
10	-9	8	2	2	1
11	-8	14	6	3	2
12	-7	6	9	1	2
13	-6	29	10	7	3
14	-5	33	19	8	5
15	-4	44	22	11	6
16	-3	56	30	14	8
17	-2	49	37	12	10
18	-1	58	44	14	12
19	0	27	38	7	10
20	1	21	41	5	11
21	2	22	28	5	8
22	3	9	19	2	5
23	4	6	21	1	6
24	5	2	15	0	4
25	6	1	8	0	2
26	7	2	6	0	2
27	8	1	6	0	2
28	9	.	1	.	0
29	10	1	.	0	.
30	11	.	2	.	1
31	13	2	.	0	.
32	14	1	.	0	.

JER SS and twostep breeding value for nordic AI bulls with no offspring

Obs	BYR	name	no	mean_noff	std_noff	mean_ss	mean_two	std_ss	std_two	mean_dif	std_dif	corr_SS
1	2019	brth	20	.	.	98.3	100.0	7.3	2.6	-1.7	5.1	0.89
2	2020	brth	6	.	.	102.7	101.3	6.3	1.9	1.3	5.0	0.77
3	2021	brth	22	.	.	103.6	101.0	6.8	2.8	2.6	4.4	0.90
4	2022	brth	31	.	.	102.5	100.1	5.5	2.4	2.4	4.0	0.75
5	2023	brth	28	.	.	103.9	101.1	6.5	2.4	2.8	5.1	0.69
6	2019	calv	19	.	.	100.4	102.1	7.0	5.2	-1.8	4.2	0.80
7	2020	calv	27	.	.	101.4	102.2	7.5	5.8	-0.8	6.0	0.61
8	2021	calv	40	.	.	101.3	103.8	6.8	4.8	-2.5	4.5	0.74
9	2022	calv	34	.	.	102.3	104.5	6.5	4.8	-2.2	4.7	0.69
10	2023	calv	28	.	.	104.1	104.8	7.6	5.5	-0.7	5.8	0.65

JER SS and twostep breeding value for nordic AI bulls with no offspring

Obs	diff	d_brth	d_calv	p_brth	p_calv
1	-13	1	1	1	1
2	-11	.	5	.	3
3	-10	.	3	.	2
4	-9	2	5	2	3
5	-8	1	5	1	3
6	-7	4	9	4	6
7	-6	1	7	1	5
8	-5	4	4	4	3
9	-4	3	12	3	8
10	-3	3	13	3	9
11	-2	5	19	5	13
12	-1	7	10	7	7
13	0	4	6	4	4
14	1	16	11	15	7
15	2	8	8	7	5
16	3	14	9	13	6
17	4	6	6	6	4
18	5	6	5	6	3
19	6	2	.	2	.
20	7	7	2	7	1
21	8	6	4	6	3
22	9	4	2	4	1
23	11	2	1	2	1
24	14	1	.	1	.
25	15	.	1	.	1

JER SS and twostep breeding value for Nordic bulls with no offspring

Obs	BYR	name	no	mean_ss	mean_two	std_ss	std_two	mean_dif	std_dif	corr_SS
1	2020	brth	452	99.0	99.9	6.8	2.6	-0.9	4.9	0.81
2	2021	brth	392	101.2	100.1	7.0	2.7	1.1	4.9	0.85
3	2022	brth	475	102.7	100.5	5.6	2.4	2.2	4.1	0.75
4	2023	brth	597	103.9	100.9	6.2	2.4	3.1	4.8	0.71
5	2024	brth	82	103.4	100.6	6.1	2.5	2.8	4.7	0.68
6	2020	calv	507	100.1	101.2	8.3	6.4	-1.1	5.5	0.75
7	2021	calv	428	102.2	103.0	7.2	5.4	-0.8	5.2	0.70
8	2022	calv	484	101.7	102.3	6.9	5.3	-0.6	5.5	0.63
9	2023	calv	597	101.8	102.6	6.9	5.6	-0.8	5.3	0.66
10	2024	calv	82	103.0	102.2	6.7	4.8	0.8	5.8	0.54

JER SS and twostep breeding value for Nordic bulls with no offspring

Obs	diff	d_brth	d_calv	p_brth	p_calv
1	-18	1	1	0	0
2	-17	.	3	.	0
3	-16	.	3	.	0
4	-15	4	5	0	0
5	-14	.	12	.	1
6	-13	4	10	0	0
7	-12	4	13	0	1
8	-11	6	30	0	1
9	-10	10	33	1	2
10	-9	15	52	1	2
11	-8	28	60	1	3
12	-7	36	73	2	3
13	-6	54	104	3	5
14	-5	65	102	3	5
15	-4	82	136	4	6
16	-3	81	144	4	7
17	-2	132	138	7	7
18	-1	140	182	7	9
19	0	155	152	8	7
20	1	136	150	7	7
21	2	180	128	9	6
22	3	168	125	8	6
23	4	149	103	7	5
24	5	120	85	6	4
25	6	104	67	5	3
26	7	87	50	4	2
27	8	87	62	4	3
28	9	48	19	2	1
29	10	41	21	2	1
30	11	32	12	2	1
31	12	15	5	1	0
32	13	5	7	0	0
33	14	4	4	0	0
34	15	4	3	0	0
35	16	.	1	.	0
36	17	1	3	0	0

JER breeding values for SS full and SS reduc for nordic AI bulls with minimum 15 offspring in full

Obs	BYR	name	no	mean_noff	std_noff	mean_ss	mean_rss	std_ss	std_rss	mean_dif	std_dif	corr_SS
1	2010	dSB1	55	156	188	98.2	98.6	8.2	8.6	-0.4	1.7	0.98
2	2011	dSB1	47	137	158	96.7	97.8	8.6	8.7	-1.1	1.9	0.97
3	2012	dSB1	47	272	522	98.8	99.6	7.6	7.7	-0.8	1.7	0.97
4	2013	dSB1	50	218	498	96.8	97.0	8.5	8.5	-0.2	1.9	0.97
5	2014	dSB1	36	391	557	99.7	100.1	7.0	7.6	-0.4	2.1	0.96
6	2015	dSB1	30	877	858	99.6	101.2	7.1	8.2	-1.6	2.1	0.97
7	2016	dSB1	26	517	580	100.8	102.7	9.0	6.4	-1.8	6.3	0.72
8	2017	dSB1	29	970	827	101.2	102.3	9.1	5.1	-1.1	8.9	0.31
9	2018	dSB1	20	660	866	100.8	100.7	7.1	4.5	0.1	6.7	0.39
10	2019	dSB1	29	995	760	105.0	102.1	12.4	5.2	2.9	11.5	0.38
11	2020	dSB1	24	913	760	102.5	101.6	10.8	4.4	0.9	10.6	0.24
12	2021	dSB1	14	515	511	107.9	101.9	8.7	5.0	5.9	8.9	0.26
13	2010	dCE1	55	150	184	98.9	98.9	8.4	8.8	0.0	1.8	0.98
14	2011	dCE1	47	135	163	97.3	98.0	8.2	8.4	-0.7	1.6	0.98
15	2012	dCE1	47	263	512	101.1	101.8	9.1	9.2	-0.7	1.6	0.98
16	2013	dCE1	50	210	486	96.8	96.8	8.7	9.1	0.0	2.0	0.98
17	2014	dCE1	36	378	543	103.3	103.2	7.9	8.4	0.1	2.3	0.96
18	2015	dCE1	30	844	834	103.7	102.6	9.5	9.8	1.1	1.8	0.98
19	2016	dCE1	26	490	554	100.5	103.0	7.5	7.4	-2.5	7.0	0.55
20	2017	dCE1	29	924	783	102.0	102.2	8.4	6.0	-0.2	9.0	0.26
21	2018	dCE1	20	631	829	101.2	102.0	7.6	6.5	-0.8	7.1	0.50
22	2019	dCE1	29	939	723	100.4	100.1	7.9	6.9	0.2	7.4	0.51
23	2020	dCE1	23	880	698	101.3	102.3	6.5	5.9	-1.0	8.0	0.17
24	2021	dCE1	14	467	461	107.7	102.6	5.6	6.4	5.1	8.0	0.11
25	2010	dCS1	55	116	143	97.3	97.4	6.3	6.4	-0.1	1.1	0.99
26	2011	dCS1	47	107	118	99.4	99.4	7.5	7.7	0.0	1.1	0.99
27	2012	dCS1	47	220	422	98.5	98.3	7.0	7.0	0.2	1.2	0.98
28	2013	dCS1	50	186	415	99.3	99.1	7.2	7.4	0.1	1.1	0.99
29	2014	dCS1	36	333	466	96.0	96.0	6.4	6.8	0.0	1.5	0.97
30	2015	dCS1	30	715	688	98.4	98.2	5.7	5.5	0.2	1.3	0.97
31	2016	dCS1	25	472	513	100.8	99.4	5.6	5.1	1.4	3.7	0.76
32	2017	dCS1	29	802	681	101.4	100.1	6.1	5.4	1.3	3.6	0.81
33	2018	dCS1	20	588	776	101.4	100.8	3.9	3.9	0.7	3.1	0.69
34	2019	dCS1	29	826	623	103.7	101.7	4.4	4.1	1.9	4.3	0.50
35	2020	dCS1	22	852	637	100.8	100.3	5.0	4.5	0.5	4.6	0.54
36	2021	dCS1	14	440	432	102.4	97.7	4.9	5.6	4.7	6.5	0.23
37	2010	dSB2	55	395	389	98.1	98.4	10.1	10.5	-0.2	2.2	0.98

JER breeding values for SS full and SS reduc for nordic AI bulls with minimum 15 offspring in full

Obs	BYR	name	no	mean_noff	std_noff	mean_ss	mean_rss	std_ss	std_rss	mean_dif	std_dif	corr_SS
38	2011	dSB2	48	320	262	95.0	96.2	10.1	10.1	-1.3	3.0	0.95
39	2012	dSB2	47	593	976	98.0	98.8	9.0	9.4	-0.8	1.9	0.98
40	2013	dSB2	51	457	692	95.2	95.6	11.5	11.4	-0.4	2.6	0.98
41	2014	dSB2	37	750	823	97.3	97.9	8.0	8.2	-0.6	2.7	0.95
42	2015	dSB2	30	1666	1422	99.5	101.0	8.4	8.8	-1.5	2.7	0.95
43	2016	dSB2	26	1086	989	97.7	100.5	11.5	7.1	-2.8	9.3	0.59
44	2017	dSB2	29	1665	1218	103.8	102.9	10.3	5.9	0.9	9.9	0.35
45	2018	dSB2	20	919	1041	102.2	98.5	9.5	4.2	3.7	10.4	0.00
46	2019	dSB2	31	1212	958	105.4	102.7	15.3	5.9	2.7	13.6	0.48
47	2020	dSB2	25	901	792	104.9	101.1	14.0	6.6	3.8	14.6	0.14
48	2021	dSB2	12	554	455	111.1	101.4	11.3	6.7	9.7	10.4	0.42
49	2010	dCE2	55	382	389	100.2	100.0	9.8	10.4	0.2	2.1	0.98
50	2011	dCE2	47	315	274	97.5	98.1	8.9	9.2	-0.6	2.2	0.97
51	2012	dCE2	47	571	967	100.4	101.0	9.8	10.3	-0.6	2.1	0.98
52	2013	dCE2	51	435	678	96.8	97.2	10.2	10.9	-0.4	2.8	0.97
53	2014	dCE2	37	714	789	101.3	101.4	8.7	9.0	-0.1	2.7	0.95
54	2015	dCE2	30	1598	1390	102.7	102.3	8.1	8.1	0.4	1.7	0.98
55	2016	dCE2	26	1025	949	99.1	102.0	8.5	8.0	-3.0	9.4	0.35
56	2017	dCE2	29	1595	1173	100.9	102.0	11.5	6.4	-1.1	11.6	0.26
57	2018	dCE2	20	868	999	101.1	100.0	11.0	8.0	1.1	11.3	0.33
58	2019	dCE2	31	1146	930	99.4	100.8	10.7	8.0	-1.4	10.5	0.40
59	2020	dCE2	25	840	738	98.8	99.9	12.0	7.7	-1.1	12.9	0.19
60	2021	dCE2	12	512	419	105.8	99.7	7.5	7.8	6.2	8.9	0.33
61	2010	dCS2	55	299	289	98.0	98.2	6.0	6.1	-0.1	0.7	0.99
62	2011	dCS2	47	250	178	99.4	99.5	7.6	7.7	-0.1	0.8	0.99
63	2012	dCS2	47	483	782	98.6	98.4	7.3	7.4	0.2	0.8	0.99
64	2013	dCS2	51	392	574	98.7	98.7	7.1	6.9	0.1	1.1	0.99
65	2014	dCS2	37	646	693	95.9	95.8	6.8	7.1	0.1	1.0	0.99
66	2015	dCS2	30	1362	1122	97.6	96.8	6.0	6.2	0.7	0.7	0.99
67	2016	dCS2	26	957	874	99.2	98.8	6.8	6.0	0.4	3.9	0.82
68	2017	dCS2	29	1371	983	100.9	99.8	6.4	6.0	1.1	4.0	0.80
69	2018	dCS2	20	796	924	98.5	99.3	4.1	4.7	-0.8	3.9	0.61
70	2019	dCS2	31	969	763	102.9	101.8	4.9	4.9	1.1	4.9	0.48
71	2020	dCS2	24	791	661	101.3	100.8	4.7	5.0	0.5	4.7	0.52
72	2021	dCS2	12	480	393	101.5	98.5	4.2	5.3	3.0	4.7	0.54
73	2010	mSB1	55	168	178	93.7	94.1	9.2	8.4	-0.4	3.0	0.95
74	2011	mSB1	47	142	156	91.6	90.9	8.7	8.8	0.7	2.4	0.96

JER breeding values for SS full and SS reduc for nordic AI bulls with minimum 15 offspring in full

Obs	BYR	name	no	mean_noff	std_noff	mean_ss	mean_rss	std_ss	std_rss	mean_dif	std_dif	corr_SS
75	2012	mSB1	47	296	546	95.3	94.1	11.5	11.7	1.1	2.7	0.97
76	2013	mSB1	50	226	437	96.0	95.8	8.3	7.9	0.2	3.4	0.91
77	2014	mSB1	36	395	505	95.6	94.2	9.2	10.4	1.4	3.9	0.93
78	2015	mSB1	30	960	952	102.1	100.8	7.0	6.6	1.3	5.0	0.73
79	2016	mSB1	26	654	687	100.1	98.2	8.4	6.4	2.0	6.8	0.60
80	2017	mSB1	29	989	787	101.4	100.4	8.8	6.2	1.0	8.4	0.42
81	2018	mSB1	20	636	841	98.6	96.8	10.8	3.7	1.9	9.7	0.47
82	2019	mSB1	29	581	583	104.9	101.9	7.9	5.0	3.0	7.6	0.38
83	2010	mCE1	55	163	176	95.3	95.2	9.4	8.6	0.1	2.3	0.97
84	2011	mCE1	47	139	161	96.0	96.1	8.8	8.7	-0.1	2.6	0.95
85	2012	mCE1	47	285	534	97.9	96.9	9.1	9.5	0.9	3.1	0.95
86	2013	mCE1	50	216	423	97.7	98.0	9.7	9.1	-0.4	4.3	0.90
87	2014	mCE1	36	375	483	98.3	98.6	8.5	8.3	-0.4	5.8	0.76
88	2015	mCE1	30	920	926	104.6	103.6	5.7	5.8	1.0	5.3	0.57
89	2016	mCE1	26	620	655	100.5	98.7	6.9	5.1	1.9	6.0	0.53
90	2017	mCE1	29	927	733	103.6	102.8	6.8	7.4	0.8	7.4	0.46
91	2018	mCE1	20	594	795	100.2	100.6	5.6	5.6	-0.4	5.5	0.52
92	2019	mCE1	29	534	539	105.8	103.3	5.4	7.7	2.5	7.3	0.41
93	2010	mCS1	55	135	145	99.7	99.6	6.7	7.0	0.1	2.3	0.95
94	2011	mCS1	47	116	115	95.8	95.8	8.4	8.1	0.0	2.4	0.96
95	2012	mCS1	47	245	439	97.2	98.1	7.7	8.0	-1.0	2.8	0.94
96	2013	mCS1	50	190	351	97.4	97.7	5.7	6.8	-0.2	3.2	0.89
97	2014	mCS1	36	336	419	95.8	96.3	8.2	7.1	-0.6	4.3	0.85
98	2015	mCS1	30	802	777	98.9	98.8	7.4	6.7	0.2	4.9	0.76
99	2016	mCS1	26	585	615	100.0	100.8	5.8	6.1	-0.8	5.5	0.57
100	2017	mCS1	29	824	653	99.7	99.8	6.9	5.8	-0.1	5.7	0.61
101	2018	mCS1	20	562	754	101.8	100.9	6.6	6.2	0.9	5.7	0.61
102	2019	mCS1	29	504	503	99.5	99.8	6.1	4.3	-0.3	5.2	0.55
103	2010	mSB2	55	136	150	95.1	94.8	8.3	9.4	0.3	4.9	0.85
104	2011	mSB2	47	115	134	96.1	94.4	9.7	9.5	1.7	5.5	0.83
105	2012	mSB2	47	231	406	97.0	95.8	9.8	10.1	1.2	6.2	0.81
106	2013	mSB2	50	180	335	97.1	96.5	9.4	10.0	0.6	7.4	0.71
107	2014	mSB2	36	313	398	94.9	93.8	10.7	10.1	1.1	8.0	0.70
108	2015	mSB2	30	678	638	99.2	101.0	8.7	8.5	-1.8	8.2	0.55
109	2016	mSB2	26	418	444	98.7	96.2	12.3	7.9	2.6	11.0	0.48
110	2017	mSB2	29	454	372	100.2	99.3	10.3	8.2	0.9	10.3	0.39
111	2018	mSB2	14	332	373	98.1	95.6	13.5	6.6	2.6	11.0	0.59

JER breeding values for SS full and SS reduc for nordic AI bulls with minimum 15 offspring in full

Obs	BYR	name	no	mean_noff	std_noff	mean_ss	mean_rss	std_ss	std_rss	mean_dif	std_dif	corr_SS
112	2010	mCE2	55	132	147	98.4	98.4	7.8	8.7	0.0	3.9	0.89
113	2011	mCE2	47	112	135	100.9	100.2	7.1	7.3	0.7	4.5	0.81
114	2012	mCE2	47	223	396	99.0	99.1	7.9	7.8	0.0	5.0	0.80
115	2013	mCE2	50	173	325	101.3	101.1	8.3	8.9	0.3	7.6	0.61
116	2014	mCE2	36	300	384	100.5	101.3	8.0	8.6	-0.7	7.9	0.56
117	2015	mCE2	30	653	620	103.6	104.7	6.5	7.2	-1.1	7.5	0.39
118	2016	mCE2	26	393	420	100.1	99.8	8.5	7.7	0.3	8.7	0.43
119	2017	mCE2	29	427	346	102.4	103.5	8.5	7.3	-1.1	8.8	0.38
120	2018	mCE2	13	334	353	97.9	101.1	8.5	7.7	-3.2	10.1	0.22
121	2010	mCS2	55	113	122	95.7	95.8	7.1	7.4	-0.1	2.5	0.94
122	2011	mCS2	47	94	94	93.0	94.1	8.6	8.3	-1.1	3.4	0.92
123	2012	mCS2	47	193	327	95.1	95.5	7.0	7.7	-0.4	4.9	0.78
124	2013	mCS2	50	153	270	94.4	93.9	6.2	6.2	0.5	3.7	0.83
125	2014	mCS2	36	269	336	95.4	95.6	6.9	5.9	-0.2	5.4	0.65
126	2015	mCS2	30	563	507	97.3	96.0	6.5	6.0	1.3	5.2	0.65
127	2016	mCS2	25	385	397	98.4	98.0	6.6	5.7	0.3	5.0	0.67
128	2017	mCS2	29	386	319	97.6	95.9	6.9	5.6	1.7	6.4	0.49
129	2018	mCS2	12	347	342	102.8	101.3	8.0	5.0	1.6	5.8	0.69
130	2010	brth	55	156	188	98.4	98.8	9.4	9.8	-0.4	2.1	0.98
131	2011	brth	47	137	158	96.2	97.2	9.0	9.5	-1.0	2.7	0.96
132	2012	brth	47	272	522	99.0	99.8	8.3	8.8	-0.8	1.8	0.98
133	2013	brth	50	218	498	95.9	96.2	10.3	10.4	-0.3	2.2	0.98
134	2014	brth	36	391	557	99.3	99.9	7.4	8.0	-0.5	2.5	0.95
135	2015	brth	30	877	858	100.3	101.9	7.5	8.7	-1.6	2.3	0.97
136	2016	brth	26	517	580	99.7	102.6	10.4	7.2	-2.9	7.9	0.65
137	2017	brth	29	970	827	102.5	103.2	10.2	5.6	-0.7	10.2	0.27
138	2018	brth	20	660	866	101.8	100.4	8.9	5.0	1.5	8.7	0.32
139	2019	brth	29	995	760	105.8	102.7	14.1	6.2	3.1	12.4	0.47
140	2020	brth	24	913	760	103.5	101.6	12.8	5.7	1.8	13.3	0.13
141	2021	brth	14	515	511	110.1	101.9	9.5	6.0	8.1	9.6	0.29
142	2010	calv	55	168	178	94.0	94.2	8.8	8.9	-0.2	3.3	0.93
143	2011	calv	47	142	156	93.7	92.3	9.5	9.0	1.4	3.5	0.93
144	2012	calv	47	296	546	96.0	94.6	10.3	11.0	1.4	3.6	0.95
145	2013	calv	50	226	437	96.6	96.5	8.8	9.0	0.2	5.1	0.84
146	2014	calv	36	395	505	95.8	94.5	10.3	10.9	1.3	5.7	0.86
147	2015	calv	30	960	952	102.1	102.2	6.7	6.9	-0.1	6.1	0.60
148	2016	calv	26	654	687	99.7	97.7	10.0	7.4	2.0	8.4	0.57

JER breeding values for SS full and SS reduc for nordic AI bulls with minimum 15 offspring in full

Obs	BYR	name	no	mean_noff	std_noff	mean_ss	mean_rss	std_ss	std_rss	mean_dif	std_dif	corr_SS
149	2017	calv	29	989	787	101.8	101.1	9.3	7.5	0.7	9.5	0.38
150	2018	calv	20	636	841	98.0	97.4	10.9	4.7	0.6	9.1	0.56
151	2019	calv	29	581	583	105.1	103.1	7.7	6.5	1.9	7.6	0.43

JER changes for SS full and SS reduc for nordic AI bulls with minimum 15 offspring in full, born >=2015

Obs	diff	d_brth	d_calv	p_brth	p_calv
1	-36	.	.	.	.
2	-31	.	.	.	.
3	-30	.	.	.	.
4	-28	1	.	1	.
5	-27	2	.	1	.
6	-26	2	.	1	.
7	-25	.	.	.	.
8	-24	.	.	.	.
9	-23	.	1	.	1
10	-22	.	.	.	.
11	-21	.	.	.	.
12	-20	.	.	.	.
13	-19	1	.	1	.
14	-18	.	1	.	1
15	-17	.	.	.	.
16	-16	1	2	1	1
17	-15	1	1	1	1
18	-14	1	2	1	1
19	-13	4	3	2	2
20	-12	1	.	1	.
21	-11	5	1	3	1
22	-10	3	3	2	2
23	-9	1	1	1	1
24	-8	3	.	2	.
25	-7	6	4	3	3
26	-6	3	6	2	4
27	-5	4	2	2	1
28	-4	16	1	9	1
29	-3	9	10	5	7
30	-2	10	9	6	7
31	-1	15	8	9	6
32	0	3	5	2	4
33	1	12	8	7	6
34	2	6	15	3	11
35	3	2	3	1	2
36	4	10	4	6	3
37	5	3	9	2	7

JER changes for SS full and SS reduc for nordic AI bulls with minimum 15 offspring in full, born >=2015

Obs	diff	d_brth	d_calv	p_brth	p_calv
38	6	8	3	5	2
39	7	4	4	2	3
40	8	.	14	.	10
41	9	3	2	2	1
42	10	7	3	4	2
43	11	4	3	2	2
44	12	2	1	1	1
45	13	4	1	2	1
46	14	.	1	.	1
47	15	4	.	2	.
48	16	.	.	.	.
49	17	.	1	.	1
50	18	4	1	2	1
51	19	1	1	1	1
52	20	1	1	1	1
53	21	3	1	2	1
54	22	.	.	.	.
55	23	1	.	1	.
56	24	1	.	1	.
57	25	.	.	.	.
58	26	1	.	1	.
59	27	.	.	.	.
60	28	.	1	.	1
61	29	1	.	1	.
62	38	.	.	.	.

JER changes for SS full and SS reduc for nordic AI bulls with minimum 15 offspring in full, born >=2015

Obs	diff	d_dSB1	d_dCE1	d_dCS1	d_dSB2	d_dCE2	d_dCS2
1	-36	.	.	.	.	1	.
2	-31	.	.	.	1	.	.
3	-30	.	.	.	.	1	.
4	-28	.	.	.	.	.	.
5	-27	.	.	.	1	1	.
6	-26	.	.	.	.	.	.
7	-25	1	.	.	1	.	.
8	-24	1	.	.	1	.	.
9	-23	.	.	.	1	.	.
10	-22	.	1	.	1	.	.
11	-21	1	.	.	1	.	.
12	-20	.	.	.	.	3	.
13	-19	2	.	.	.	2	.
14	-18	1	.	.	.	1	.
15	-17	.	.	.	1	4	.
16	-16	2	1	.	1	.	.
17	-15	1	1	.	.	.	.
18	-14	1	3	.	.	3	.
19	-13	1	3	.	5	3	1
20	-12	3	2	.	2	3	.
21	-11	2	4	.	2	2	.
22	-10	2	1	.	5	4	2
23	-9	1	6	.	2	6	.
24	-8	4	2	2	5	2	1
25	-7	4	6	2	3	3	2
26	-6	5	11	1	5	9	2
27	-5	10	7	5	7	4	4
28	-4	9	7	3	7	6	8
29	-3	9	6	11	6	5	11
30	-2	14	9	12	8	8	19
31	-1	11	7	12	14	9	7
32	0	10	6	30	14	13	19
33	1	11	14	18	6	15	32
34	2	5	13	18	3	7	16
35	3	9	11	12	6	10	10
36	4	7	9	16	6	1	6
37	5	5	5	5	5	8	11

JER changes for SS full and SS reduc for nordic AI bulls with minimum 15 offspring in full, born >=2015

Obs	diff	d_dSB1	d_dCE1	d_dCS1	d_dSB2	d_dCE2	d_dCS2
38	6	4	10	8	2	9	10
39	7	5	9	4	4	3	5
40	8	5	3	3	6	4	1
41	9	2	2	4	5	.	2
42	10	4	4	2	2	4	.
43	11	1	1	.	3	.	2
44	12	6	1	2	4	3	.
45	13	2	3	.	2	5	.
46	14	4	.	.	7	1	1
47	15	.	2	.	2	.	.
48	16	4	.	.	4	1	.
49	17	1	1	.	3	1	.
50	18	1	.	.	.	1	.
51	19	1	.	.	1	3	.
52	20	1	.	1	2	.	.
53	21	.	1	.	1	.	.
54	22	.	.	.	.	1	.
55	23	.	1	.	.	.	.
56	24	1	.	.	1	1	.
57	25	.	.	.	.	1	.
58	26	.	.	.	2	1	.
59	27	.	.	.	3	1	.
60	28	.	.	.	.	.	.
61	29	.	.	.	.	.	.
62	38	.	.	.	1	.	.

JER changes for SS full and SS reduc for nordic AI bulls with minimum 15 offspring in full, born >=2015

Obs	diff	d_mSB1	d_mCE1	d_mCS1	d_mSB2	d_mCE2	d_mCS2
1	-36	.	.	.	.	.	.
2	-31	.	.	.	.	.	.
3	-30	.	.	.	.	.	.
4	-28	.	.	.	.	.	.
5	-27	.	.	.	.	.	.
6	-26	.	.	.	.	.	.
7	-25	.	.	.	.	.	.
8	-24	.	.	.	2	.	.
9	-23	1	.	.	.	.	.
10	-22	.	.	.	1	.	.
11	-21	.	.	.	1	.	.
12	-20	.	.	.	1	.	.
13	-19	.	.	.	.	.	.
14	-18	.	.	.	1	2	.
15	-17	.	1	.	1	2	.
16	-16	.	.	.	.	1	.
17	-15	1	.	.	2	.	.
18	-14	1	1	.	1	4	.
19	-13	.	1	2	1	1	2
20	-12	3	1	1	1	2	.
21	-11	1	1	2	1	1	.
22	-10	1	1	2	2	1	1
23	-9	.	1	6	3	5	1
24	-8	5	6	2	3	5	.
25	-7	4	3	2	1	6	3
26	-6	4	7	5	3	3	5
27	-5	5	2	4	4	4	3
28	-4	4	8	6	4	4	6
29	-3	8	6	7	3	6	6
30	-2	3	4	11	5	4	9
31	-1	5	5	10	3	2	8
32	0	10	7	16	3	7	7
33	1	7	10	9	9	7	10
34	2	9	5	4	2	8	3
35	3	3	16	8	10	4	7
36	4	8	6	11	4	2	4

JER changes for SS full and SS reduc for nordic AI bulls with minimum 15 offspring in full, born >=2015

Obs	diff	d_mSB1	d_mCE1	d_mCS1	d_mSB2	d_mCE2	d_mCS2
37	5	9	8	7	6	3	4
38	6	6	6	3	2	1	4
39	7	9	9	10	5	2	2
40	8	6	4	3	2	4	6
41	9	9	8	2	1	2	5
42	10	4	3	3	3	4	1
43	11	4	3	.	3	1	3
44	12	1	1	.	3	1	2
45	13	1	1	.	1	1	1
46	14	.	.	.	1	1	.
47	15	1	.	.	.	1	.
48	16	1	.	.	1	.	.
49	17	.	.	.	1	.	.
50	18	.	.	.	1	.	.
51	19	1	2	.	.	.	.
52	20	.	.	.	.	1	.
53	21	1	.	.	.	.	.
54	22	.	.	.	1	2	.
55	23	.	.	.	.	.	.
56	24	.	.	.	1	.	.
57	25	.	.	.	.	.	.
58	26	.	.	.	.	.	.
59	27	.	.	.	1	.	.
60	28	1	.	.	.	.	.
61	29	.	.	.	1	.	.
62	38	.	.	.	.	.	.

JER changes for SS full and SS reduc for nordic AI bulls with minimum 15 offspring in full, born >=2015

Obs	diff	p_dSB1	p_dCE1	p_dCS1	p_dSB2	p_dCE2	p_dCS2
1	-36	.	.	.	.	1	.
2	-31	.	.	.	1	.	.
3	-30	.	.	.	.	1	.
4	-28	.	.	.	.	.	.
5	-27	.	.	.	1	1	.
6	-26	.	.	.	.	.	.
7	-25	1	.	.	1	.	.
8	-24	1	.	.	1	.	.
9	-23	.	.	.	1	.	.
10	-22	.	1	.	1	.	.
11	-21	1	.	.	1	.	.
12	-20	.	.	.	.	2	.
13	-19	1	.	.	.	1	.
14	-18	1	.	.	.	1	.
15	-17	.	.	.	1	2	.
16	-16	1	1	.	1	.	.
17	-15	1	1	.	.	.	.
18	-14	1	2	.	.	2	.
19	-13	1	2	.	3	2	1
20	-12	2	1	.	1	2	.
21	-11	1	2	.	1	1	.
22	-10	1	1	.	3	2	1
23	-9	1	3	.	1	3	.
24	-8	2	1	1	3	1	1
25	-7	2	3	1	2	2	1
26	-6	3	6	1	3	5	1
27	-5	6	4	3	4	2	2
28	-4	5	4	2	4	3	5
29	-3	5	3	6	3	3	6
30	-2	8	5	7	5	5	11
31	-1	6	4	7	8	5	4
32	0	6	3	18	8	7	11
33	1	6	8	11	3	9	19
34	2	3	8	11	2	4	9
35	3	5	6	7	3	6	6
36	4	4	5	9	3	1	3

JER changes for SS full and SS reduc for nordic AI bulls with minimum 15 offspring in full, born >=2015

Obs	diff	p_dSB1	p_dCE1	p_dCS1	p_dSB2	p_dCE2	p_dCS2
37	5	3	3	3	3	5	6
38	6	2	6	5	1	5	6
39	7	3	5	2	2	2	3
40	8	3	2	2	3	2	1
41	9	1	1	2	3	.	1
42	10	2	2	1	1	2	.
43	11	1	1	.	2	.	1
44	12	3	1	1	2	2	.
45	13	1	2	.	1	3	.
46	14	2	.	.	4	1	1
47	15	.	1	.	1	.	.
48	16	2	.	.	2	1	.
49	17	1	1	.	2	1	.
50	18	1	.	.	.	1	.
51	19	1	.	.	1	2	.
52	20	1	.	1	1	.	.
53	21	.	1	.	1	.	.
54	22	.	.	.	.	1	.
55	23	.	1	.	.	.	.
56	24	1	.	.	1	1	.
57	25	.	.	.	.	1	.
58	26	.	.	.	1	1	.
59	27	.	.	.	2	1	.
60	28	.	.	.	.	.	.
61	29	.	.	.	.	.	.
62	38	.	.	.	1	.	.

JER changes for SS full and SS reduc for nordic AI bulls with minimum 15 offspring in full, born >=2015

Obs	diff	p_mSB1	p_mCE1	p_mCS1	p_mSB2	p_mCE2	p_mCS2
1	-36	.	.	.	.	.	.
2	-31	.	.	.	.	.	.
3	-30	.	.	.	.	.	.
4	-28	.	.	.	.	.	.
5	-27	.	.	.	.	.	.
6	-26	.	.	.	.	.	.
7	-25	.	.	.	.	.	.
8	-24	.	.	.	2	.	.
9	-23	1	.	.	.	.	.
10	-22	.	.	.	1	.	.
11	-21	.	.	.	1	.	.
12	-20	.	.	.	1	.	.
13	-19	.	.	.	.	.	.
14	-18	.	.	.	1	2	.
15	-17	.	1	.	1	2	.
16	-16	.	.	.	.	1	.
17	-15	1	.	.	2	.	.
18	-14	1	1	.	1	4	.
19	-13	.	1	1	1	1	2
20	-12	2	1	1	1	2	.
21	-11	1	1	1	1	1	.
22	-10	1	1	1	2	1	1
23	-9	.	1	4	3	5	1
24	-8	4	4	1	3	5	.
25	-7	3	2	1	1	6	3
26	-6	3	5	4	3	3	5
27	-5	4	1	3	4	4	3
28	-4	3	6	4	4	4	6
29	-3	6	4	5	3	6	6
30	-2	2	3	8	5	4	9
31	-1	4	4	7	3	2	8
32	0	7	5	12	3	7	7
33	1	5	7	7	8	7	10
34	2	7	4	3	2	8	3
35	3	2	12	6	9	4	7
36	4	6	4	8	4	2	4

JER changes for SS full and SS reduc for nordic AI bulls with minimum 15 offspring in full, born >=2015

Obs	diff	p_mSB1	p_mCE1	p_mCS1	p_mSB2	p_mCE2	p_mCS2
37	5	7	6	5	6	3	4
38	6	4	4	2	2	1	4
39	7	7	7	7	5	2	2
40	8	4	3	2	2	4	6
41	9	7	6	1	1	2	5
42	10	3	2	2	3	4	1
43	11	3	2	.	3	1	3
44	12	1	1	.	3	1	2
45	13	1	1	.	1	1	1
46	14	.	.	.	1	1	.
47	15	1	.	.	.	1	.
48	16	1	.	.	1	.	.
49	17	.	.	.	1	.	.
50	18	.	.	.	1	.	.
51	19	1	1	.	.	.	.
52	20	.	.	.	.	1	.
53	21	1	.	.	.	.	.
54	22	.	.	.	1	2	.
55	23	.	.	.	.	.	.
56	24	.	.	.	1	.	.
57	25	.	.	.	.	.	.
58	26	.	.	.	.	.	.
59	27	.	.	.	1	.	.
60	28	1	.	.	.	.	.
61	29	.	.	.	1	.	.
62	38	.	.	.	.	.	.

JER breeding values for traditional full and reduc for nordic AI bulls with minimum 15 offspring in full

Obs	BYR	name	no	mean_noff	std_noff	mean_e	mean_re	std_e	std_re	mean_dif	std_dif	corr_SS
1	2010	dSB1	55	156	188	99.7	99.7	8.1	8.4	0.0	1.1	0.99
2	2011	dSB1	47	137	158	98.4	98.6	9.2	9.3	-0.1	2.1	0.97
3	2012	dSB1	47	272	522	99.4	99.4	8.3	8.3	0.0	1.5	0.98
4	2013	dSB1	50	218	498	97.4	97.1	9.0	8.8	0.3	1.4	0.99
5	2014	dSB1	36	391	557	100.9	100.6	7.9	8.3	0.3	1.8	0.98
6	2015	dSB1	30	877	858	100.2	100.8	7.0	7.8	-0.6	2.1	0.96
7	2016	dSB1	26	517	580	101.1	101.0	9.4	6.1	0.0	7.8	0.56
8	2017	dSB1	29	970	827	101.0	100.6	9.4	4.5	0.5	9.4	0.24
9	2018	dSB1	20	660	866	100.3	99.1	6.9	4.2	1.2	8.1	-0.02
10	2019	dSB1	29	995	760	103.9	99.9	13.2	4.9	4.0	13.9	0.05
11	2020	dSB1	24	913	760	100.0	99.3	12.7	3.0	0.7	13.8	-0.29
12	2021	dSB1	14	515	511	106.4	98.6	9.2	2.6	7.8	10.2	-0.24
13	2010	dCE1	55	150	184	99.9	100.0	8.7	8.9	-0.2	1.2	0.99
14	2011	dCE1	47	135	163	98.7	98.7	8.7	8.7	0.0	0.8	1.00
15	2012	dCE1	47	263	512	101.4	101.4	9.2	9.4	0.0	1.1	0.99
16	2013	dCE1	50	210	486	96.6	96.3	9.0	9.0	0.2	1.3	0.99
17	2014	dCE1	36	378	543	103.3	103.2	8.0	8.4	0.1	1.5	0.99
18	2015	dCE1	30	844	834	103.3	102.5	9.5	9.5	0.8	1.2	0.99
19	2016	dCE1	26	490	554	100.3	103.7	7.7	5.1	-3.4	7.2	0.41
20	2017	dCE1	29	924	783	102.1	101.8	8.9	4.6	0.4	9.0	0.23
21	2018	dCE1	20	631	829	101.6	101.4	7.2	4.6	0.2	7.1	0.35
22	2019	dCE1	29	939	723	100.3	100.6	7.5	4.2	-0.3	7.0	0.40
23	2020	dCE1	23	880	698	100.0	101.0	7.6	3.4	-1.0	8.4	-0.02
24	2021	dCE1	14	467	461	107.9	101.2	6.1	2.0	6.6	5.6	0.43
25	2010	dCS1	55	116	143	97.1	97.1	6.4	6.4	0.0	0.6	1.00
26	2011	dCS1	47	107	118	99.4	99.4	7.6	7.4	0.0	0.8	1.00
27	2012	dCS1	47	220	422	98.2	98.2	6.7	6.8	0.0	0.9	0.99
28	2013	dCS1	50	186	415	99.1	99.1	7.1	7.3	0.0	1.0	0.99
29	2014	dCS1	36	333	466	96.2	96.5	6.6	7.0	-0.3	1.5	0.98
30	2015	dCS1	30	715	688	98.2	97.8	5.9	5.7	0.4	1.2	0.98
31	2016	dCS1	25	472	513	100.9	98.2	5.5	3.8	2.7	5.6	0.33
32	2017	dCS1	29	802	681	101.3	98.9	6.0	4.9	2.4	5.0	0.59
33	2018	dCS1	20	588	776	100.9	99.0	4.0	2.6	2.0	4.1	0.29
34	2019	dCS1	29	826	623	102.9	99.5	4.6	2.9	3.4	4.2	0.43
35	2020	dCS1	22	852	637	100.5	98.3	5.2	2.5	2.2	5.8	0.00
36	2021	dCS1	14	440	432	102.5	97.9	6.5	2.1	4.6	6.5	0.18
37	2010	dSB2	55	395	389	99.6	99.5	10.2	10.6	0.1	1.4	0.99

JER breeding values for traditional full and reduc for nordic AI bulls with minimum 15 offspring in full

Obs	BYR	name	no	mean_noff	std_noff	mean_e	mean_re	std_e	std_re	mean_dif	std_dif	corr_SS
38	2011	dSB2	48	320	262	96.9	97.1	11.0	10.7	-0.2	3.2	0.96
39	2012	dSB2	47	593	976	98.6	98.5	10.3	10.8	0.1	1.9	0.98
40	2013	dSB2	51	457	692	95.3	95.3	11.9	11.7	0.1	2.0	0.99
41	2014	dSB2	37	750	823	98.6	98.4	8.6	9.0	0.3	2.5	0.96
42	2015	dSB2	30	1666	1422	100.7	101.2	8.4	8.6	-0.5	2.6	0.95
43	2016	dSB2	26	1086	989	98.2	99.2	12.5	6.7	-1.0	11.4	0.42
44	2017	dSB2	29	1665	1218	104.3	101.4	10.4	5.2	2.9	10.0	0.33
45	2018	dSB2	20	919	1041	102.5	97.0	10.2	3.5	5.5	12.0	-0.39
46	2019	dSB2	31	1212	958	104.3	100.6	16.9	5.3	3.7	17.6	0.02
47	2020	dSB2	25	901	792	103.0	98.5	16.5	3.7	4.5	18.2	-0.39
48	2021	dSB2	12	554	455	110.8	98.8	11.5	2.7	11.9	11.4	0.14
49	2010	dCE2	55	382	389	101.0	100.9	10.8	11.1	0.1	1.0	1.00
50	2011	dCE2	47	315	274	98.7	98.8	10.5	10.5	-0.1	1.2	0.99
51	2012	dCE2	47	571	967	100.5	100.5	10.4	10.9	0.0	1.7	0.99
52	2013	dCE2	51	435	678	96.7	96.3	10.7	10.8	0.4	1.8	0.99
53	2014	dCE2	37	714	789	102.3	102.1	8.9	9.2	0.2	1.7	0.98
54	2015	dCE2	30	1598	1390	103.8	103.2	8.4	8.3	0.6	1.7	0.98
55	2016	dCE2	26	1025	949	99.6	103.3	9.6	4.8	-3.7	10.3	0.11
56	2017	dCE2	29	1595	1173	102.0	102.1	12.3	4.5	-0.1	12.5	0.15
57	2018	dCE2	20	868	999	102.2	99.5	11.1	5.3	2.7	12.3	0.00
58	2019	dCE2	31	1146	930	99.5	101.4	11.8	3.7	-1.9	11.0	0.38
59	2020	dCE2	25	840	738	98.1	99.4	13.4	4.1	-1.4	14.6	-0.18
60	2021	dCE2	12	512	419	107.8	100.7	7.6	1.6	7.1	7.5	0.16
61	2010	dCS2	55	299	289	97.7	97.8	6.1	6.2	0.0	0.5	1.00
62	2011	dCS2	47	250	178	98.9	99.1	7.4	7.4	-0.2	0.6	1.00
63	2012	dCS2	47	483	782	98.4	98.4	7.1	7.4	0.0	0.8	0.99
64	2013	dCS2	51	392	574	98.6	98.6	7.1	7.0	0.0	0.9	0.99
65	2014	dCS2	37	646	693	96.2	96.2	7.0	7.1	0.1	1.1	0.99
66	2015	dCS2	30	1362	1122	97.4	96.6	6.3	6.3	0.8	0.6	1.00
67	2016	dCS2	26	957	874	99.2	98.1	6.6	4.5	1.1	7.0	0.25
68	2017	dCS2	29	1371	983	101.0	98.7	6.3	4.4	2.3	5.0	0.62
69	2018	dCS2	20	796	924	98.2	98.1	3.8	2.9	0.1	3.5	0.47
70	2019	dCS2	31	969	763	102.4	99.2	4.7	3.1	3.1	4.3	0.45
71	2020	dCS2	24	791	661	101.1	98.4	4.8	2.3	2.8	5.6	-0.14
72	2021	dCS2	12	480	393	100.7	97.8	4.3	2.2	2.8	5.1	-0.16
73	2010	mSB1	55	168	178	94.3	94.4	8.6	8.0	-0.1	2.3	0.97
74	2011	mSB1	47	142	156	91.1	90.5	8.6	8.6	0.5	2.6	0.95

JER breeding values for traditional full and reduc for nordic AI bulls with minimum 15 offspring in full

Obs	BYR	name	no	mean_noff	std_noff	mean_e	mean_re	std_e	std_re	mean_dif	std_dif	corr_SS
75	2012	mSB1	47	296	546	95.0	94.1	11.9	11.7	1.0	3.2	0.96
76	2013	mSB1	50	226	437	96.3	96.0	8.6	8.1	0.3	3.4	0.92
77	2014	mSB1	36	395	505	94.7	93.3	9.5	10.4	1.4	4.4	0.91
78	2015	mSB1	30	960	952	101.1	99.7	7.7	6.9	1.4	5.4	0.73
79	2016	mSB1	26	654	687	98.8	96.6	9.7	6.2	2.2	7.6	0.62
80	2017	mSB1	29	989	787	100.4	98.9	9.1	6.2	1.6	9.0	0.35
81	2018	mSB1	20	636	841	96.9	95.1	11.1	4.1	1.8	12.2	-0.10
82	2019	mSB1	29	581	583	103.3	99.8	7.4	4.5	3.6	7.5	0.29
83	2010	mCE1	55	163	176	95.1	95.3	9.3	8.6	-0.2	2.0	0.98
84	2011	mCE1	47	139	161	96.5	96.4	9.1	9.5	0.1	2.6	0.96
85	2012	mCE1	47	285	534	97.2	96.8	10.0	10.1	0.4	2.8	0.96
86	2013	mCE1	50	216	423	98.1	98.5	10.2	9.5	-0.5	4.4	0.90
87	2014	mCE1	36	375	483	97.1	97.7	8.8	8.6	-0.6	5.8	0.78
88	2015	mCE1	30	920	926	103.6	102.2	6.6	6.9	1.5	5.6	0.66
89	2016	mCE1	26	620	655	99.7	98.4	8.2	5.9	1.3	6.4	0.64
90	2017	mCE1	29	927	733	102.3	101.6	6.4	6.6	0.7	8.2	0.21
91	2018	mCE1	20	594	795	97.4	97.1	5.6	4.1	0.3	6.0	0.27
92	2019	mCE1	29	534	539	104.1	101.1	5.9	4.8	2.9	6.5	0.28
93	2010	mCS1	55	135	145	98.9	99.1	6.7	6.9	-0.2	1.9	0.96
94	2011	mCS1	47	116	115	96.4	96.2	8.7	8.1	0.2	2.3	0.96
95	2012	mCS1	47	245	439	97.4	97.9	7.3	7.5	-0.5	2.7	0.93
96	2013	mCS1	50	190	351	97.3	96.7	5.9	6.6	0.6	3.0	0.89
97	2014	mCS1	36	336	419	95.4	95.4	9.2	7.2	0.0	6.1	0.75
98	2015	mCS1	30	802	777	98.5	97.7	7.3	6.0	0.8	5.7	0.64
99	2016	mCS1	26	585	615	99.8	99.2	5.5	4.9	0.7	6.0	0.34
100	2017	mCS1	29	824	653	98.8	98.3	6.9	4.6	0.5	5.7	0.57
101	2018	mCS1	20	562	754	100.6	99.3	7.1	4.1	1.4	5.5	0.62
102	2019	mCS1	29	504	503	98.5	97.6	6.2	2.8	0.9	5.6	0.42
103	2010	mSB2	55	136	150	95.6	95.6	9.3	10.4	0.1	4.6	0.90
104	2011	mSB2	47	115	134	96.3	94.5	10.0	10.4	1.8	5.8	0.84
105	2012	mSB2	47	231	406	97.4	95.7	10.4	10.5	1.7	7.7	0.73
106	2013	mSB2	50	180	335	97.6	96.6	9.5	10.5	1.1	7.9	0.69
107	2014	mSB2	36	313	398	95.3	94.2	11.0	9.7	1.1	8.2	0.69
108	2015	mSB2	30	678	638	97.9	100.9	10.4	9.7	-3.0	8.5	0.64
109	2016	mSB2	26	418	444	97.7	95.2	14.3	7.3	2.6	12.8	0.45
110	2017	mSB2	29	454	372	99.1	98.1	10.7	7.8	0.9	10.1	0.44
111	2018	mSB2	14	332	373	97.1	93.9	15.8	5.0	3.2	13.8	0.53

JER breeding values for traditional full and reduc for nordic AI bulls with minimum 15 offspring in full

Obs	BYR	name	no	mean_noff	std_noff	mean_e	mean_re	std_e	std_re	mean_dif	std_dif	corr_SS
112	2010	mCE2	55	132	147	98.7	98.9	8.1	8.9	-0.2	3.5	0.92
113	2011	mCE2	47	112	135	101.0	100.6	7.6	8.3	0.4	4.6	0.84
114	2012	mCE2	47	223	396	99.2	98.6	8.6	8.8	0.6	5.8	0.78
115	2013	mCE2	50	173	325	101.7	101.0	8.6	10.0	0.7	8.3	0.61
116	2014	mCE2	36	300	384	99.9	100.8	8.5	8.4	-0.9	7.8	0.57
117	2015	mCE2	30	653	620	103.2	103.6	7.4	8.4	-0.4	8.7	0.40
118	2016	mCE2	26	393	420	100.3	100.5	8.3	6.0	-0.2	8.5	0.34
119	2017	mCE2	29	427	346	101.0	102.1	8.1	5.9	-1.0	9.6	0.10
120	2018	mCE2	13	334	353	95.9	98.7	10.7	5.4	-2.8	10.5	0.29
121	2010	mCS2	55	113	122	95.5	95.7	7.0	7.3	-0.2	2.7	0.93
122	2011	mCS2	47	94	94	92.5	94.1	8.7	8.1	-1.5	3.9	0.90
123	2012	mCS2	47	193	327	95.3	95.1	6.4	7.2	0.1	4.9	0.74
124	2013	mCS2	50	153	270	94.3	93.5	6.3	6.1	0.7	4.8	0.69
125	2014	mCS2	36	269	336	95.4	95.0	7.5	5.5	0.3	7.0	0.45
126	2015	mCS2	30	563	507	96.6	94.4	6.6	5.0	2.2	6.0	0.49
127	2016	mCS2	25	385	397	97.2	96.5	6.5	4.1	0.8	6.1	0.41
128	2017	mCS2	29	386	319	97.6	95.0	6.9	4.1	2.6	6.9	0.30
129	2018	mCS2	12	347	342	102.5	97.4	7.3	3.6	5.1	5.9	0.60
130	2010	brth	55	156	188	100.0	99.9	9.3	9.6	0.1	1.3	0.99
131	2011	brth	47	137	158	98.0	98.2	9.9	10.0	-0.2	2.7	0.96
132	2012	brth	47	272	522	99.6	99.6	9.3	9.6	0.0	1.8	0.98
133	2013	brth	50	218	498	96.3	96.0	10.9	10.8	0.2	1.7	0.99
134	2014	brth	36	391	557	100.4	100.5	8.1	8.8	0.0	2.1	0.97
135	2015	brth	30	877	858	101.5	101.6	7.8	8.4	-0.1	1.9	0.97
136	2016	brth	26	517	580	100.3	101.2	10.8	6.6	-0.9	9.7	0.46
137	2017	brth	29	970	827	103.0	101.5	10.7	5.0	1.5	10.7	0.24
138	2018	brth	20	660	866	101.7	98.5	8.5	4.0	3.2	9.9	-0.14
139	2019	brth	29	995	760	104.6	100.6	15.0	5.2	3.9	15.8	0.02
140	2020	brth	24	913	760	101.1	99.2	15.3	3.8	1.9	16.7	-0.27
141	2021	brth	14	515	511	108.9	99.3	10.3	2.6	9.6	10.9	-0.11
142	2010	calv	55	168	178	94.5	94.7	8.8	9.1	-0.2	3.0	0.94
143	2011	calv	47	142	156	93.6	92.1	9.4	9.4	1.5	3.8	0.92
144	2012	calv	47	296	546	96.1	94.5	11.0	11.4	1.6	4.7	0.91
145	2013	calv	50	226	437	97.3	96.7	9.1	9.5	0.6	5.4	0.83
146	2014	calv	36	395	505	94.9	94.0	10.7	10.5	0.9	6.1	0.83
147	2015	calv	30	960	952	101.0	101.3	8.3	7.5	-0.2	6.2	0.70
148	2016	calv	26	654	687	98.9	96.5	11.7	6.9	2.4	9.3	0.62

JER breeding values for traditional full and reduc for nordic AI bulls with minimum 15 offspring in full

Obs	BYR	name	no	mean_noff	std_noff	mean_e	mean_re	std_e	std_re	mean_dif	std_dif	corr_SS
149	2017	calv	29	989	787	100.6	99.4	9.3	6.5	1.1	9.2	0.37
150	2018	calv	20	636	841	96.6	95.2	11.6	5.2	1.4	11.4	0.25
151	2019	calv	29	581	583	103.6	100.4	7.2	5.0	3.2	7.4	0.31

JER changes for EBV full and EBV reduc for nordic AI bulls with minimum 15 offspring in full, born >=2015

Obs	diff	d_brth	d_calv	p_brth	p_calv
1	-39	.	.	.	.
2	-38	1	.	1	.
3	-36	.	.	.	.
4	-35	1	.	1	.
5	-34	1	.	1	.
6	-33	.	.	.	.
7	-32	.	.	.	.
8	-31	1	.	1	.
9	-30	.	.	.	.
10	-29	.	.	.	.
11	-28	.	.	.	.
12	-26	.	.	.	.
13	-25	.	1	.	1
14	-23	1	.	1	.
15	-22	.	.	.	.
16	-21	1	1	1	1
17	-20	1	.	1	.
18	-19	.	.	.	.
19	-18	.	.	.	.
20	-17	.	.	.	.
21	-16	.	3	.	2
22	-15	3	.	2	.
23	-14	3	1	2	1
24	-13	2	.	1	.
25	-12	4	.	2	.
26	-11	3	3	2	2
27	-10	1	2	1	1
28	-9	.	3	.	2
29	-8	2	4	1	3
30	-7	3	3	2	2
31	-6	5	5	3	4
32	-5	5	3	3	2
33	-4	8	5	5	4
34	-3	4	4	2	3
35	-2	10	8	6	6
36	-1	3	4	2	3

JER changes for EBV full and EBV reduc for nordic AI bulls with minimum 15 offspring in full, born >=2015

Obs	diff	d_brth	d_calv	p_brth	p_calv
37	0	24	4	14	3
38	1	6	12	3	9
39	2	6	8	3	6
40	3	8	6	5	4
41	4	3	12	2	9
42	5	7	7	4	5
43	6	1	3	1	2
44	7	3	8	2	6
45	8	4	2	2	1
46	9	7	7	4	5
47	10	3	2	2	1
48	11	7	1	4	1
49	12	4	3	2	2
50	13	1	3	1	2
51	14	6	1	3	1
52	15	3	2	2	1
53	16	2	.	1	.
54	17	5	1	3	1
55	18	.	.	.	.
56	19	.	.	.	.
57	20	.	1	.	1
58	21	1	1	1	1
59	22	.	.	.	.
60	23	3	.	2	.
61	24	.	1	.	1
62	25	1	.	1	.
63	26	1	.	1	.
64	27	2	1	1	1
65	28	.	1	.	1
66	29	.	.	.	.
67	31	.	.	.	.
68	32	.	.	.	.
69	35	3	.	2	.
70	41	.	.	.	.
71	45	.	.	.	.
72	46	.	.	.	.

JER changes for EBV full and EBV reduc for nordic AI bulls with minimum 15 offspring in full, born >=2015

Obs	diff	d_dSB1	d_dCE1	d_dCS1	d_dSB2	d_dCE2	d_dCS2
1	-39	.	.	.	1	.	.
2	-38	.	.	.	.	2	.
3	-36	.	.	.	1	.	.
4	-35	.	.	.	.	.	.
5	-34	.	.	.	.	.	.
6	-33	2	.	.	.	.	.
7	-32	.	.	.	2	.	.
8	-31	.	.	.	.	.	.
9	-30	1	.	.	.	1	.
10	-29	.	.	.	.	.	.
11	-28	.	.	.	.	1	.
12	-26	.	.	.	1	1	.
13	-25	.	.	.	2	1	.
14	-23	.	.	.	.	1	.
15	-22	.	.	.	.	.	.
16	-21	.	3	.	.	.	.
17	-20	1	.	.	.	2	.
18	-19	1	.	.	.	3	.
19	-18	.	1	.	2	2	.
20	-17	.	.	.	1	1	1
21	-16	3	1	.	.	3	.
22	-15	2	1	.	1	.	.
23	-14	3	2	.	3	2	.
24	-13	1	3	1	2	2	.
25	-12	.	1	.	3	1	.
26	-11	4	2	.	1	2	.
27	-10	2	2	1	.	1	4
28	-9	.	4	.	3	3	.
29	-8	4	5	1	6	4	1
30	-7	1	4	.	4	6	2
31	-6	7	4	2	3	8	2
32	-5	6	4	3	2	4	3
33	-4	6	8	5	2	3	5
34	-3	10	7	6	14	4	3
35	-2	10	12	10	6	4	9
36	-1	12	12	8	7	11	11

JER changes for EBV full and EBV reduc for nordic AI bulls with minimum 15 offspring in full, born >=2015

Obs	diff	d_dSB1	d_dCE1	d_dCS1	d_dSB2	d_dCE2	d_dCS2
37	0	12	10	25	9	16	17
38	1	8	19	21	10	14	37
39	2	8	12	15	5	10	15
40	3	5	10	12	9	4	8
41	4	1	4	10	7	5	11
42	5	5	4	10	5	7	4
43	6	8	4	8	3	5	13
44	7	1	4	10	2	1	5
45	8	6	4	5	4	7	4
46	9	8	8	5	5	3	3
47	10	6	3	3	7	4	5
48	11	5	7	2	5	6	5
49	12	5	2	4	2	1	2
50	13	4	4	1	2	3	2
51	14	4	1	1	4	1	.
52	15	1	.	.	1	4	.
53	16	1	1	1	4	1	.
54	17	2	.	.	5	1	.
55	18	1	.	.	3	1	.
56	19	.	.	.	2	2	.
57	20	1	.	1	2	.	.
58	21	1	.	.	2	1	.
59	22	1	.	.	.	1	.
60	23	.	.	.	1	2	.
61	24	1	.	.	.	.	.
62	25	.	.	.	2	.	.
63	26	.	.	.	.	.	.
64	27	1	.	.	.	.	.
65	28	1	.	.	.	1	.
66	29	.	.	.	2	.	.
67	31	1	.	.	1	.	.
68	32	.	.	.	1	.	.
69	35	.	.	.	.	.	.
70	41	.	.	.	1	.	.
71	45	.	.	.	1	.	.
72	46	.	.	.	1	.	.

JER changes for EBV full and EBV reduc for nordic AI bulls with minimum 15 offspring in full, born >=2015

Obs	diff	d_mSB1	d_mCE1	d_mCS1	d_mSB2	d_mCE2	d_mCS2
1	-39	.	.	.	.	.	.
2	-38	.	.	.	.	.	.
3	-36	.	.	.	.	.	.
4	-35	.	.	.	.	.	.
5	-34	.	.	.	.	.	.
6	-33	.	.	.	.	.	.
7	-32	.	.	.	.	.	.
8	-31	.	.	.	1	.	.
9	-30	.	.	.	.	.	.
10	-29	1	.	.	1	.	.
11	-28	.	.	.	.	.	.
12	-26	.	.	.	.	.	.
13	-25	.	.	.	.	.	.
14	-23	.	.	.	.	.	.
15	-22	.	.	.	.	1	.
16	-21	.	.	.	.	.	.
17	-20	.	.	.	1	3	.
18	-19	.	.	.	.	.	.
19	-18	.	.	.	.	.	.
20	-17	.	.	.	2	4	.
21	-16	1	.	.	4	.	.
22	-15	.	1	.	1	1	.
23	-14	.	1	1	1	.	1
24	-13	3	.	.	2	3	.
25	-12	.	.	.	2	1	.
26	-11	2	4	2	2	1	1
27	-10	1	3	1	1	1	2
28	-9	3	2	3	.	4	3
29	-8	2	3	3	3	2	3
30	-7	4	.	4	4	2	.
31	-6	2	5	5	6	2	3
32	-5	6	5	4	2	4	2
33	-4	7	8	9	8	9	3
34	-3	6	5	7	4	6	3
35	-2	7	11	7	1	5	6
36	-1	4	6	15	6	5	6

JER changes for EBV full and EBV reduc for nordic AI bulls with minimum 15 offspring in full, born >=2015

Obs	diff	d_mSB1	d_mCE1	d_mCS1	d_mSB2	d_mCE2	d_mCS2
37	0	8	7	5	2	4	8
38	1	6	3	7	1	6	4
39	2	7	11	12	1	2	10
40	3	7	7	8	4	4	5
41	4	1	7	8	3	6	7
42	5	12	9	8	8	7	9
43	6	4	8	3	4	2	2
44	7	9	4	2	7	4	4
45	8	12	7	7	2	3	2
46	9	2	5	8	3	1	3
47	10	5	5	2	1	.	2
48	11	4	5	1	5	3	5
49	12	3	1	3	1	3	4
50	13	1	1	1	.	.	2
51	14	1	.	.	2	2	2
52	15	1	1	.	1	1	.
53	16	.	1	.	2	1	1
54	17	.	.	.	2	.	.
55	18	1	.	.	.	1	.
56	19	.	.	.	.	.	.
57	20	.	.	.	.	.	.
58	21	1	.	.	1	.	.
59	22	1	1	.	.	.	.
60	23	.	.	.	.	1	.
61	24	.	.	.	.	.	.
62	25	.	.	.	.	.	.
63	26	.	.	.	3	.	.
64	27	.	.	.	.	.	.
65	28	1	.	.	.	.	.
66	29	1	.	.	.	.	.
67	31	.	.	.	.	.	.
68	32	.	.	.	.	.	.
69	35	.	.	.	1	.	.
70	41	.	.	.	.	.	.
71	45	.	.	.	.	.	.
72	46	.	.	.	.	.	.

JER changes for EBV full and EBV reduc for nordic AI bulls with minimum 15 offspring in full, born >=2015

Obs	diff	p_dSB1	p_dCE1	p_dCS1	p_dSB2	p_dCE2	p_dCS2
1	-39	.	.	.	1	.	.
2	-38	.	.	.	.	1	.
3	-36	.	.	.	1	.	.
4	-35	.	.	.	.	.	.
5	-34	.	.	.	.	.	.
6	-33	1	.	.	.	.	.
7	-32	.	.	.	1	.	.
8	-31	.	.	.	.	.	.
9	-30	1	.	.	.	1	.
10	-29	.	.	.	.	.	.
11	-28	.	.	.	.	1	.
12	-26	.	.	.	1	1	.
13	-25	.	.	.	1	1	.
14	-23	.	.	.	.	1	.
15	-22	.	.	.	.	.	.
16	-21	.	2	.	.	.	.
17	-20	1	.	.	.	1	.
18	-19	1	.	.	.	2	.
19	-18	.	1	.	1	1	.
20	-17	.	.	.	1	1	1
21	-16	2	1	.	.	2	.
22	-15	1	1	.	1	.	.
23	-14	2	1	.	2	1	.
24	-13	1	2	1	1	1	.
25	-12	.	1	.	2	1	.
26	-11	2	1	.	1	1	.
27	-10	1	1	1	.	1	2
28	-9	.	2	.	2	2	.
29	-8	2	3	1	3	2	1
30	-7	1	2	.	2	3	1
31	-6	4	2	1	2	5	1
32	-5	3	2	2	1	2	2
33	-4	3	5	3	1	2	3
34	-3	6	4	4	8	2	2
35	-2	6	7	6	3	2	5
36	-1	7	7	5	4	6	6

JER changes for EBV full and EBV reduc for nordic AI bulls with minimum 15 offspring in full, born >=2015

Obs	diff	p_dSB1	p_dCE1	p_dCS1	p_dSB2	p_dCE2	p_dCS2
37	0	7	6	15	5	9	10
38	1	5	11	12	6	8	22
39	2	5	7	9	3	6	9
40	3	3	6	7	5	2	5
41	4	1	2	6	4	3	6
42	5	3	2	6	3	4	2
43	6	5	2	5	2	3	8
44	7	1	2	6	1	1	3
45	8	3	2	3	2	4	2
46	9	5	5	3	3	2	2
47	10	3	2	2	4	2	3
48	11	3	4	1	3	3	3
49	12	3	1	2	1	1	1
50	13	2	2	1	1	2	1
51	14	2	1	1	2	1	.
52	15	1	.	.	1	2	.
53	16	1	1	1	2	1	.
54	17	1	.	.	3	1	.
55	18	1	.	.	2	1	.
56	19	.	.	.	1	1	.
57	20	1	.	1	1	.	.
58	21	1	.	.	1	1	.
59	22	1	.	.	.	1	.
60	23	.	.	.	1	1	.
61	24	1	.	.	.	.	.
62	25	.	.	.	1	.	.
63	26	.	.	.	.	.	.
64	27	1	.	.	.	.	.
65	28	1	.	.	.	1	.
66	29	.	.	.	1	.	.
67	31	1	.	.	1	.	.
68	32	.	.	.	1	.	.
69	35	.	.	.	.	.	.
70	41	.	.	.	1	.	.
71	45	.	.	.	1	.	.
72	46	.	.	.	1	.	.

JER changes for EBV full and EBV reduc for nordic AI bulls with minimum 15 offspring in full, born >=2015

Obs	diff	p_mSB1	p_mCE1	p_mCS1	p_mSB2	p_mCE2	p_mCS2
1	-39	.	.	.	.	.	.
2	-38	.	.	.	.	.	.
3	-36	.	.	.	.	.	.
4	-35	.	.	.	.	.	.
5	-34	.	.	.	.	.	.
6	-33	.	.	.	.	.	.
7	-32	.	.	.	.	.	.
8	-31	.	.	.	1	.	.
9	-30	.	.	.	.	.	.
10	-29	1	.	.	1	.	.
11	-28	.	.	.	.	.	.
12	-26	.	.	.	.	.	.
13	-25	.	.	.	.	.	.
14	-23	.	.	.	.	.	.
15	-22	.	.	.	.	1	.
16	-21	.	.	.	.	.	.
17	-20	.	.	.	1	3	.
18	-19	.	.	.	.	.	.
19	-18	.	.	.	.	.	.
20	-17	.	.	.	2	4	.
21	-16	1	.	.	4	.	.
22	-15	.	1	.	1	1	.
23	-14	.	1	1	1	.	1
24	-13	2	.	.	2	3	.
25	-12	.	.	.	2	1	.
26	-11	1	3	1	2	1	1
27	-10	1	2	1	1	1	2
28	-9	2	1	2	.	4	3
29	-8	1	2	2	3	2	3
30	-7	3	.	3	4	2	.
31	-6	1	4	4	6	2	3
32	-5	4	4	3	2	4	2
33	-4	5	6	7	8	9	3
34	-3	4	4	5	4	6	3
35	-2	5	8	5	1	5	6
36	-1	3	4	11	6	5	6

JER changes for EBV full and EBV reduc for nordic AI bulls with minimum 15 offspring in full, born >=2015

Obs	diff	p_mSB1	p_mCE1	p_mCS1	p_mSB2	p_mCE2	p_mCS2
37	0	6	5	4	2	4	8
38	1	4	2	5	1	6	4
39	2	5	8	9	1	2	10
40	3	5	5	6	4	4	5
41	4	1	5	6	3	6	7
42	5	9	7	6	8	7	9
43	6	3	6	2	4	2	2
44	7	7	3	1	7	4	4
45	8	9	5	5	2	3	2
46	9	1	4	6	3	1	3
47	10	4	4	1	1	.	2
48	11	3	4	1	5	3	5
49	12	2	1	2	1	3	4
50	13	1	1	1	.	.	2
51	14	1	.	.	2	2	2
52	15	1	1	.	1	1	.
53	16	.	1	.	2	1	1
54	17	.	.	.	2	.	.
55	18	1	.	.	.	1	.
56	19	.	.	.	.	.	.
57	20	.	.	.	.	.	.
58	21	1	.	.	1	.	.
59	22	1	1	.	.	.	.
60	23	.	.	.	.	1	.
61	24	.	.	.	.	.	.
62	25	.	.	.	.	.	.
63	26	.	.	.	3	.	.
64	27	.	.	.	.	.	.
65	28	1	.	.	.	.	.
66	29	1	.	.	.	.	.
67	31	.	.	.	.	.	.
68	32	.	.	.	.	.	.
69	35	.	.	.	1	.	.
70	41	.	.	.	.	.	.
71	45	.	.	.	.	.	.
72	46	.	.	.	.	.	.

JER Legarra Reverter regression for SS for bulls, born after 2015 and with minimum 15 offspring in full and no offspring in reduc

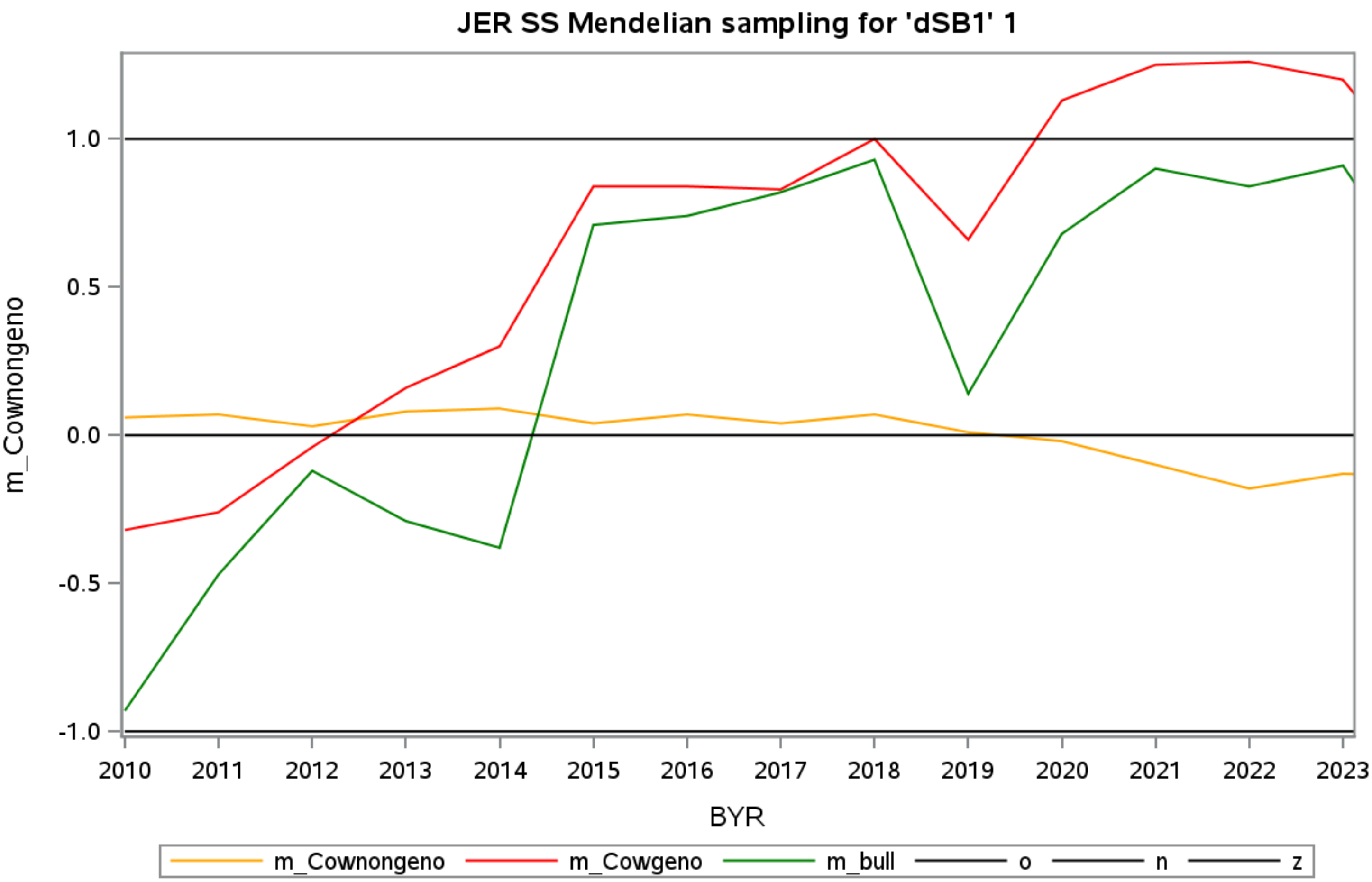
Obs	status	t	name	no	b1	rsq
1	1&2	1	dSB1	179	0.86	0.21
2	1&2	2	dCE1	177	0.46	0.15
3	1&2	3	dCS1	167	0.57	0.29
4	1&2	4	dSB2	183	0.79	0.16
5	1&2	5	dCE2	183	0.35	0.05
6	1&2	6	dCS2	171	0.66	0.37
7	1&2	7	mSB1	115	0.84	0.26
8	1&2	8	mCE1	116	0.51	0.25
9	1&2	9	mCS1	113	0.69	0.36
10	1&2	10	mSB2	78	0.73	0.24
11	1&2	11	mCE2	77	0.45	0.16
12	1&2	12	mCS2	73	0.83	0.40
13	1&2	13	brth	179	0.78	0.17
14	1&2	14	calv	115	0.78	0.29

JER Legarra Reverter regression for EBV for bulls, born after 2015 and with minimum 15 offspring in full and no offspring in reduc

Obs	status	t	name	no	b1	rsq
1	1&2	1	dSB1	179	0.61	0.08
2	1&2	2	dCE1	177	0.51	0.10
3	1&2	3	dCS1	167	0.29	0.03
4	1&2	4	dSB2	183	0.49	0.04
5	1&2	5	dCE2	183	0.18	0.01
6	1&2	6	dCS2	171	0.36	0.04
7	1&2	7	mSB1	115	0.65	0.13
8	1&2	8	mCE1	116	0.57	0.21
9	1&2	9	mCS1	113	0.76	0.28
10	1&2	10	mSB2	78	0.79	0.17
11	1&2	11	mCE2	77	0.40	0.06
12	1&2	12	mCS2	73	0.77	0.18
13	1&2	13	brth	179	0.56	0.06
14	1&2	14	calv	115	0.78	0.20

JER SS Mendelian sampling for 'dSB1' 1

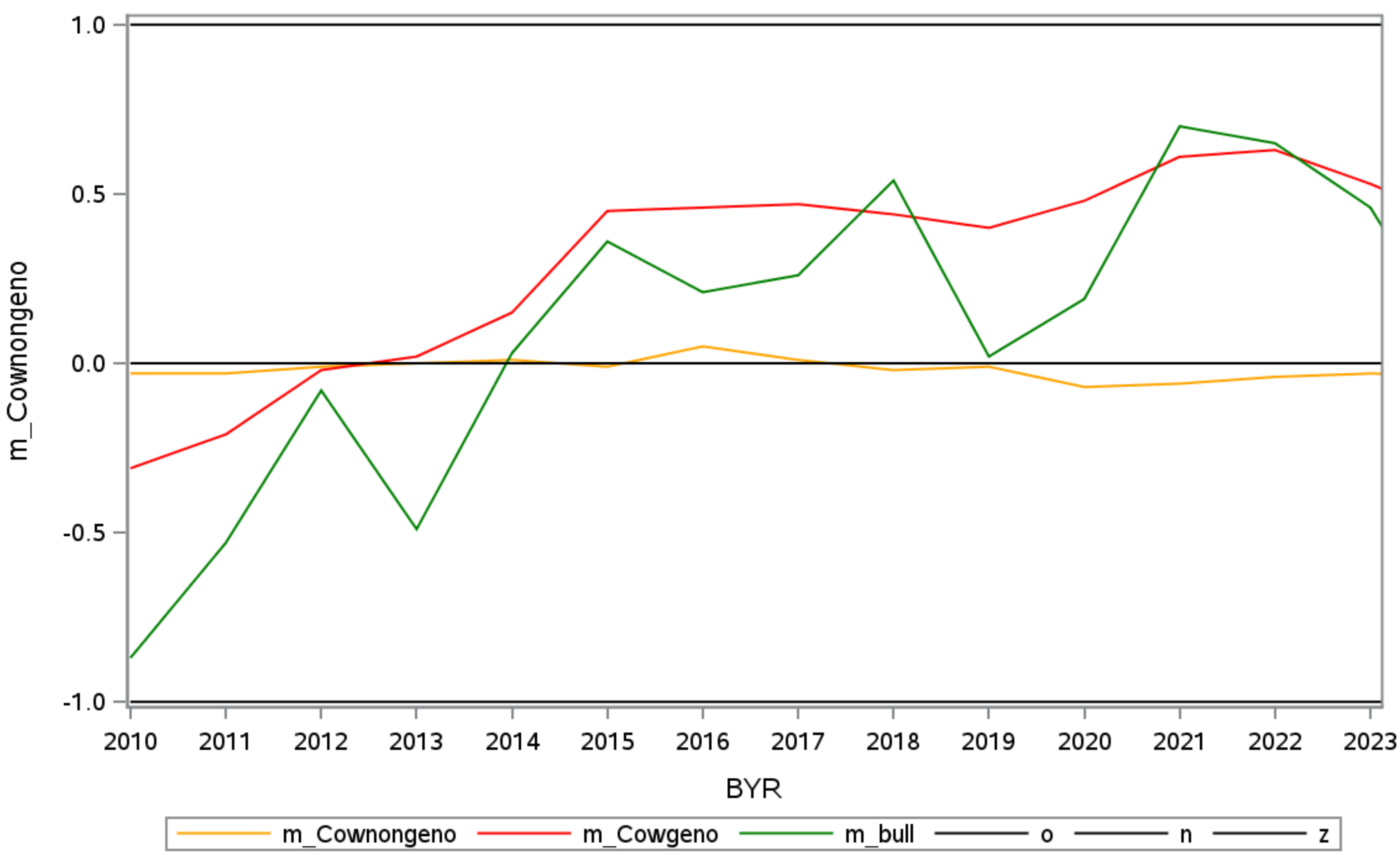
Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	0.06	-0.32	-0.93	29440	2170	242
2	2011	0.07	-0.26	-0.47	29351	4004	384
3	2012	0.03	-0.04	-0.12	29505	4681	406
4	2013	0.08	0.16	-0.29	29348	3755	416
5	2014	0.09	0.30	-0.38	28901	4722	448
6	2015	0.04	0.84	0.71	27587	5659	534
7	2016	0.07	0.84	0.74	26607	6674	470
8	2017	0.04	0.83	0.82	23975	8307	545
9	2018	0.07	1.00	0.93	25858	10310	358
10	2019	0.01	0.66	0.14	25129	12564	463
11	2020	-0.02	1.13	0.68	27357	15010	468
12	2021	-0.10	1.25	0.90	27533	14956	412
13	2022	-0.18	1.26	0.84	27641	15567	463
14	2023	-0.13	1.20	0.91	25278	13886	562
15	2024	-0.14	0.81	0.44	5654	2696	141



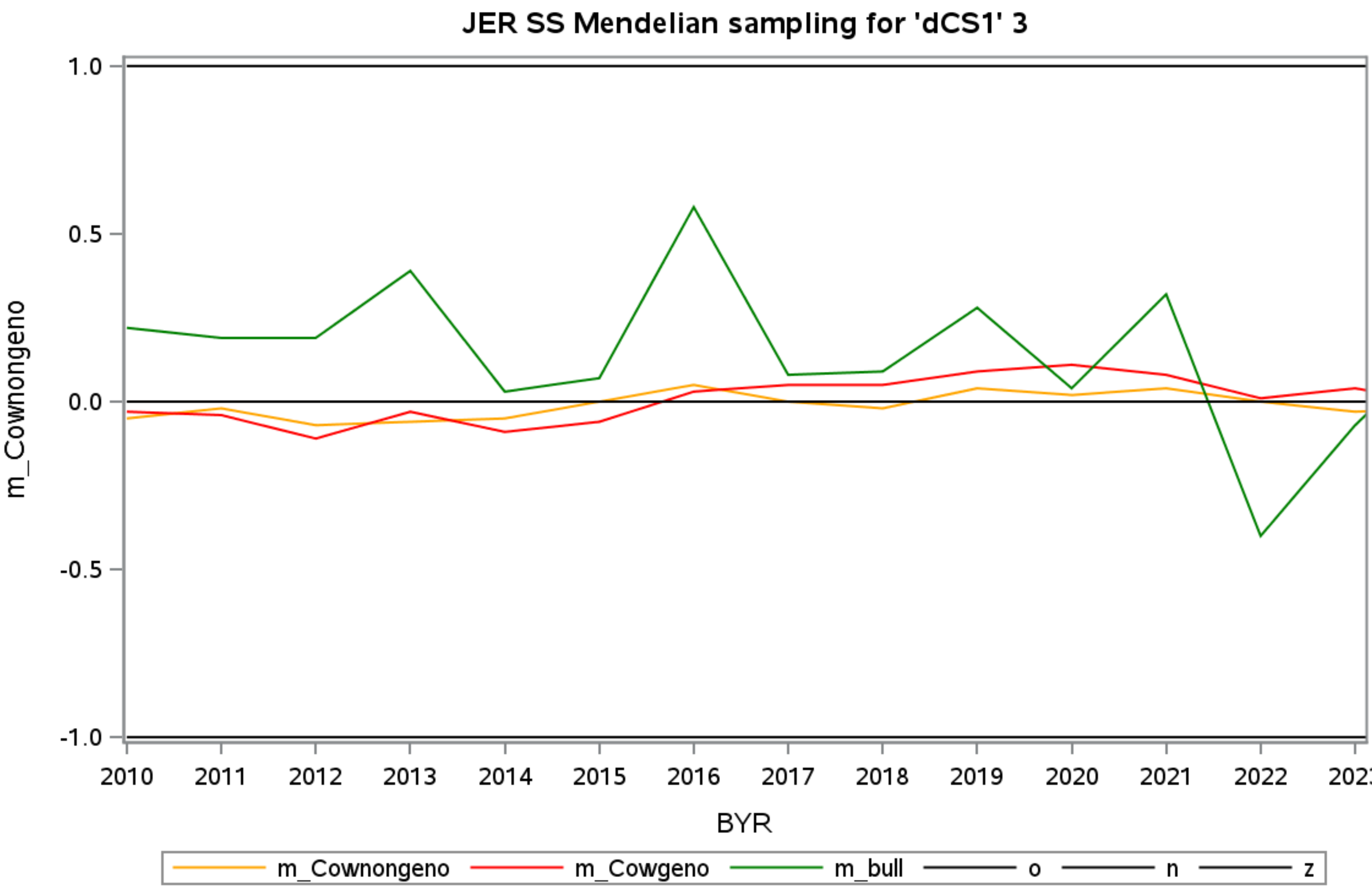
JER SS Mendelian sampling for 'dCE1' 2

Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	-0.03	-0.31	-0.87	29440	2170	242
2	2011	-0.03	-0.21	-0.53	29351	4004	384
3	2012	-0.01	-0.02	-0.08	29505	4681	406
4	2013	0.00	0.02	-0.49	29348	3755	416
5	2014	0.01	0.15	0.03	28901	4722	448
6	2015	-0.01	0.45	0.36	27587	5659	534
7	2016	0.05	0.46	0.21	26607	6674	470
8	2017	0.01	0.47	0.26	23975	8307	545
9	2018	-0.02	0.44	0.54	25858	10310	358
10	2019	-0.01	0.40	0.02	25129	12564	463
11	2020	-0.07	0.48	0.19	27357	15010	468
12	2021	-0.06	0.61	0.70	27533	14956	412
13	2022	-0.04	0.63	0.65	27641	15567	463
14	2023	-0.03	0.53	0.46	25278	13886	562
15	2024	-0.04	0.41	0.00	5654	2696	141

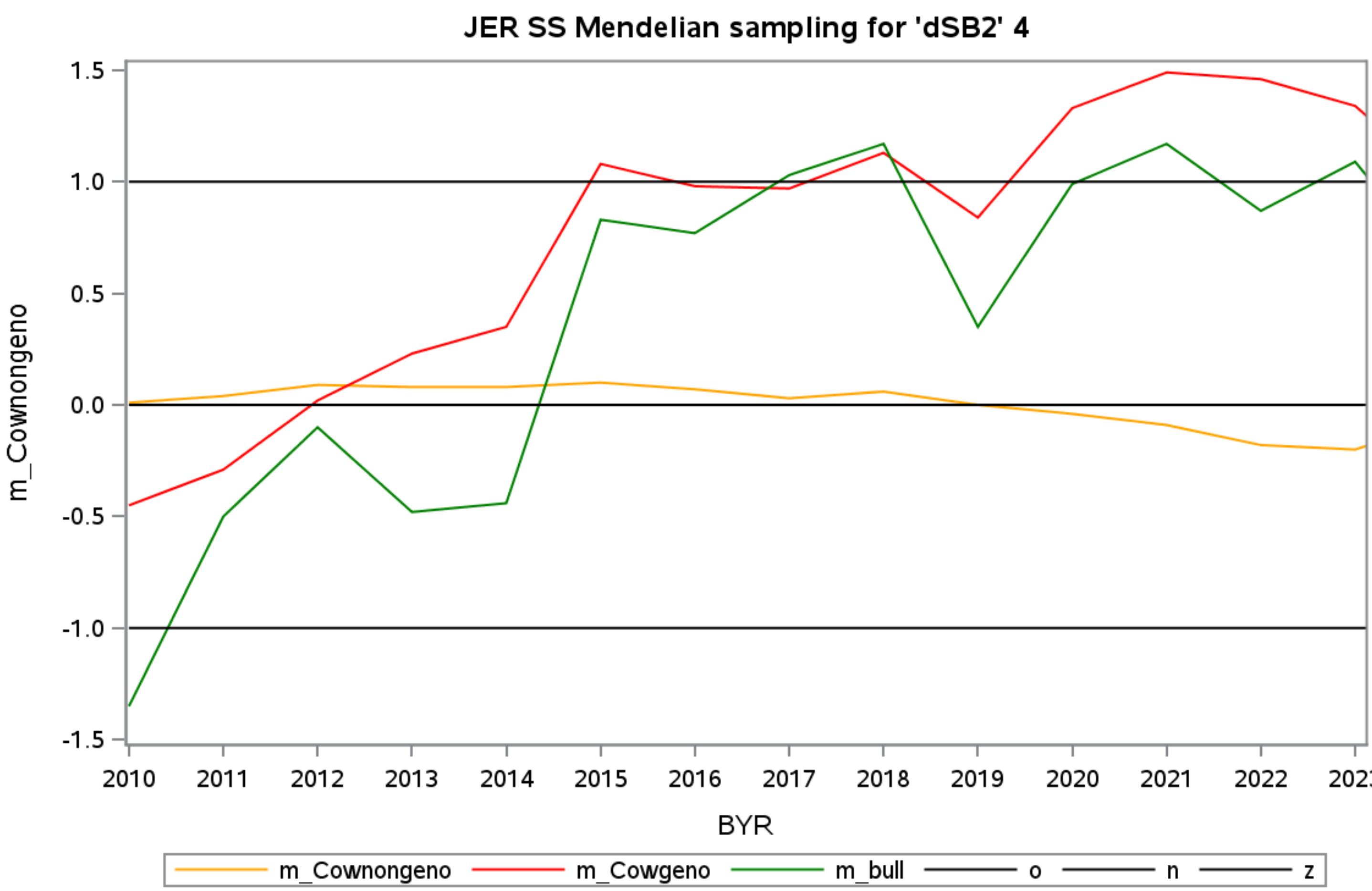
JER SS Mendelian sampling for 'dCE1' 2



Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	-0.05	-0.03	0.22	29440	2170	242
2	2011	-0.02	-0.04	0.19	29351	4004	384
3	2012	-0.07	-0.11	0.19	29505	4681	406
4	2013	-0.06	-0.03	0.39	29348	3755	416
5	2014	-0.05	-0.09	0.03	28901	4722	448
6	2015	0.00	-0.06	0.07	27587	5659	534
7	2016	0.05	0.03	0.58	26607	6674	470
8	2017	0.00	0.05	0.08	23975	8307	545
9	2018	-0.02	0.05	0.09	25858	10310	358
10	2019	0.04	0.09	0.28	25129	12564	463
11	2020	0.02	0.11	0.04	27357	15010	468
12	2021	0.04	0.08	0.32	27533	14956	412
13	2022	0.00	0.01	-0.40	27641	15567	463
14	2023	-0.03	0.04	-0.07	25278	13886	562
15	2024	-0.02	-0.01	0.20	5654	2696	141

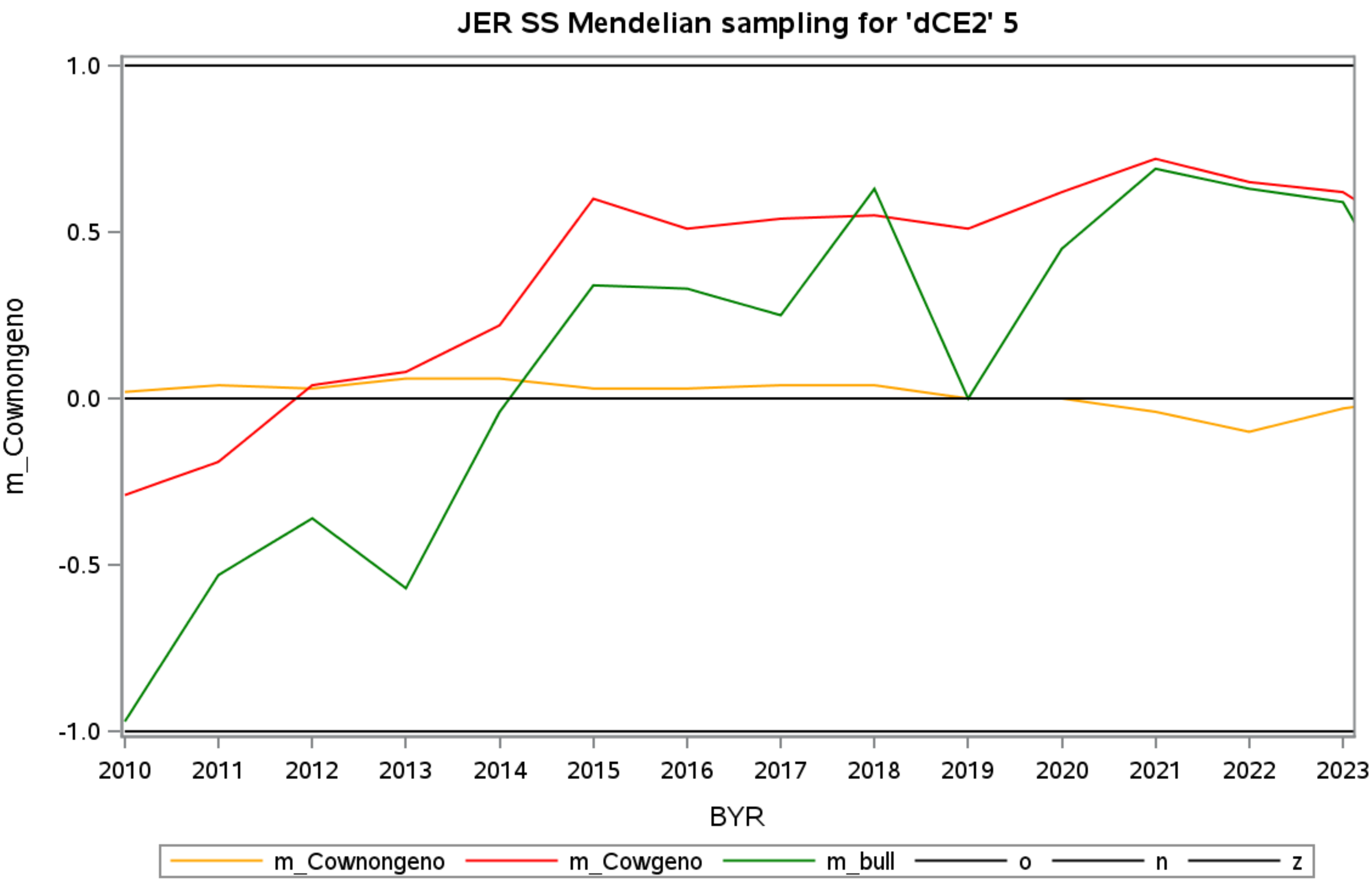


Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	0.01	-0.45	-1.35	29440	2170	242
2	2011	0.04	-0.29	-0.50	29351	4004	384
3	2012	0.09	0.02	-0.10	29505	4681	406
4	2013	0.08	0.23	-0.48	29348	3755	416
5	2014	0.08	0.35	-0.44	28901	4722	448
6	2015	0.10	1.08	0.83	27587	5659	534
7	2016	0.07	0.98	0.77	26607	6674	470
8	2017	0.03	0.97	1.03	23975	8307	545
9	2018	0.06	1.13	1.17	25858	10310	358
10	2019	0.00	0.84	0.35	25129	12564	463
11	2020	-0.04	1.33	0.99	27357	15010	468
12	2021	-0.09	1.49	1.17	27533	14956	412
13	2022	-0.18	1.46	0.87	27641	15567	463
14	2023	-0.20	1.34	1.09	25278	13886	562
15	2024	-0.06	0.97	0.57	5654	2696	141

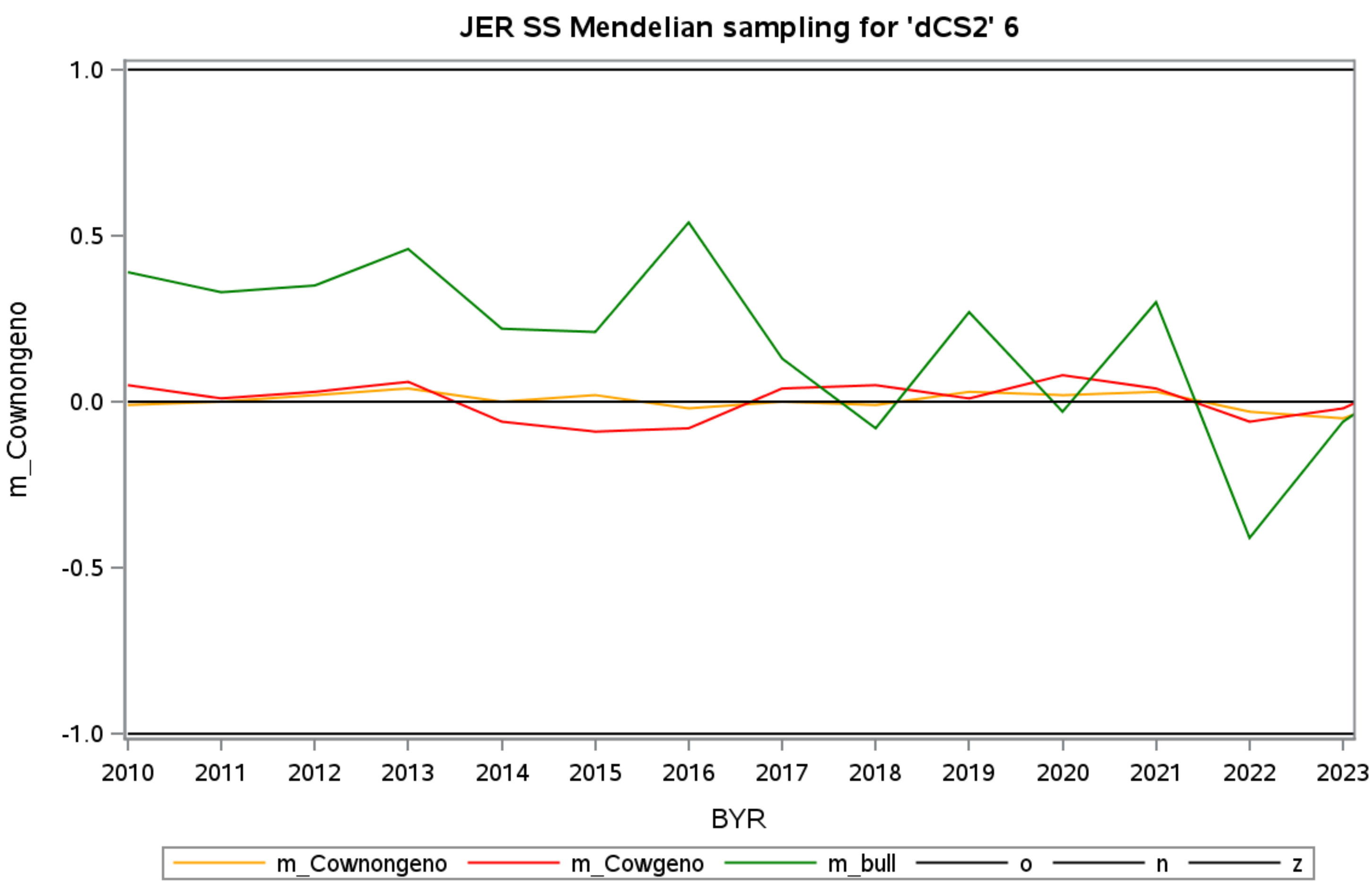


JER SS Mendelian sampling for 'dCE2' 5

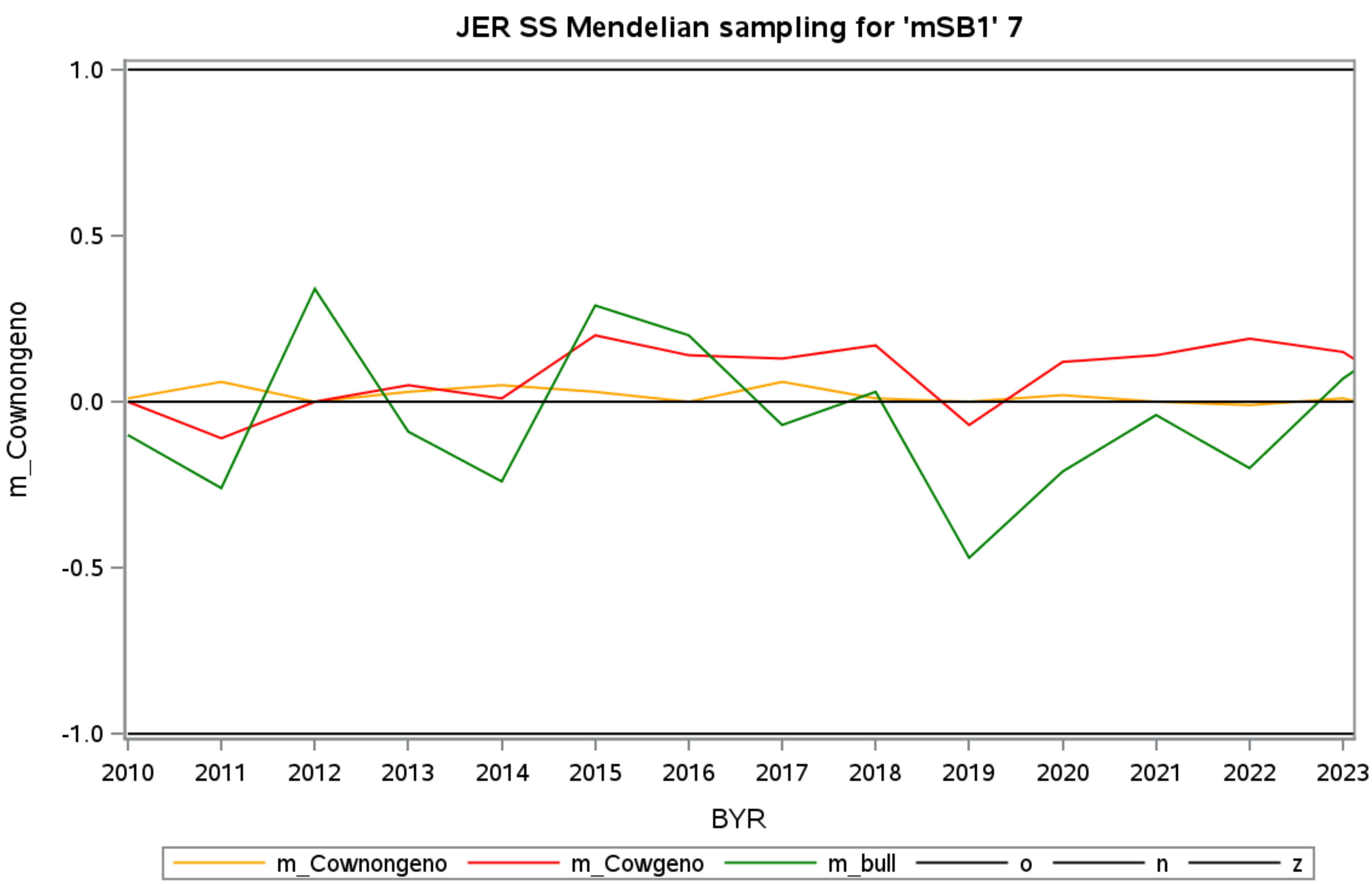
Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	0.02	-0.29	-0.97	29440	2170	242
2	2011	0.04	-0.19	-0.53	29351	4004	384
3	2012	0.03	0.04	-0.36	29505	4681	406
4	2013	0.06	0.08	-0.57	29348	3755	416
5	2014	0.06	0.22	-0.04	28901	4722	448
6	2015	0.03	0.60	0.34	27587	5659	534
7	2016	0.03	0.51	0.33	26607	6674	470
8	2017	0.04	0.54	0.25	23975	8307	545
9	2018	0.04	0.55	0.63	25858	10310	358
10	2019	0.00	0.51	0.00	25129	12564	463
11	2020	0.00	0.62	0.45	27357	15010	468
12	2021	-0.04	0.72	0.69	27533	14956	412
13	2022	-0.10	0.65	0.63	27641	15567	463
14	2023	-0.03	0.62	0.59	25278	13886	562
15	2024	0.01	0.44	0.10	5654	2696	141



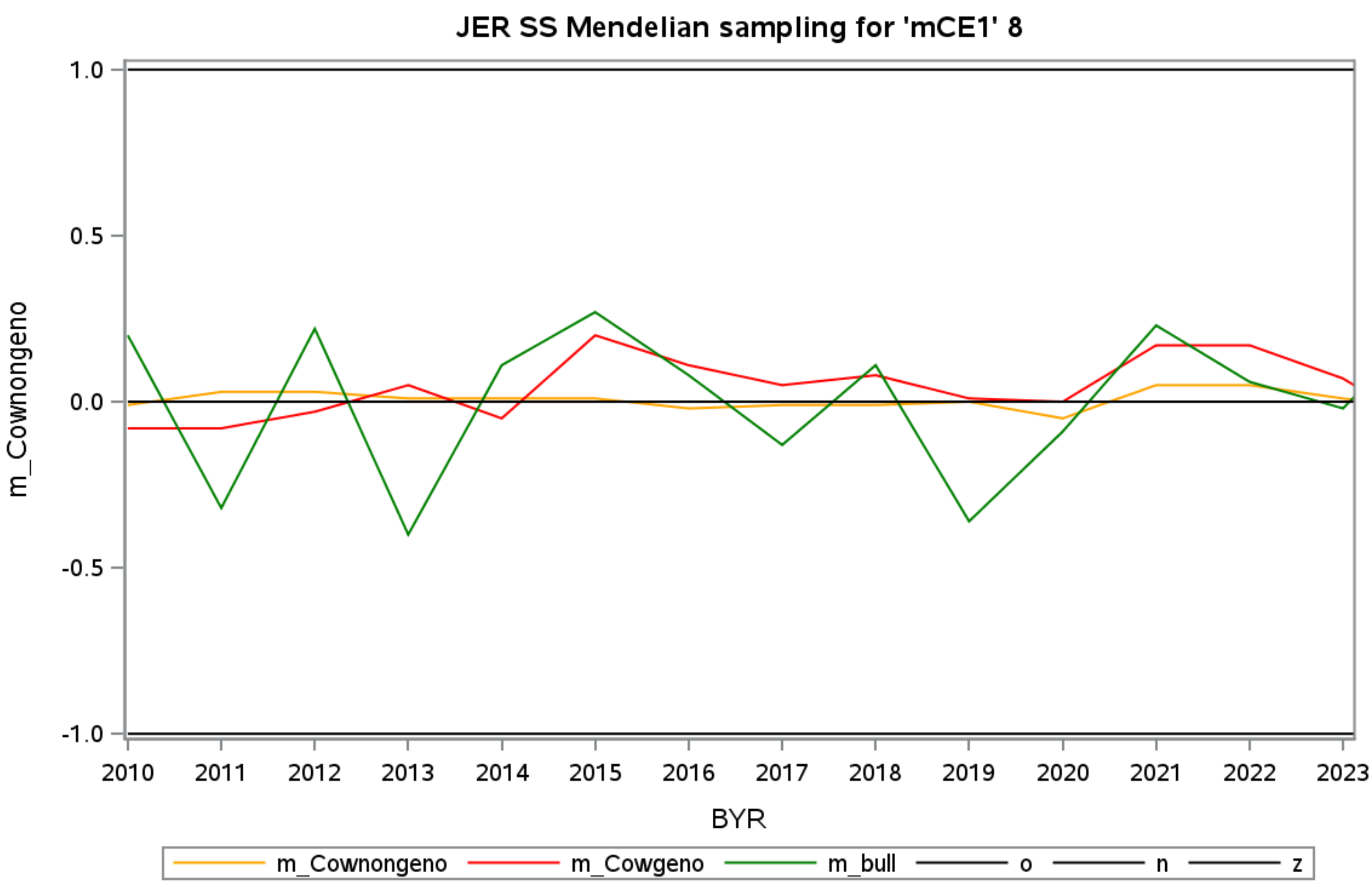
Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	-0.01	0.05	0.39	29440	2170	242
2	2011	0.00	0.01	0.33	29351	4004	384
3	2012	0.02	0.03	0.35	29505	4681	406
4	2013	0.04	0.06	0.46	29348	3755	416
5	2014	0.00	-0.06	0.22	28901	4722	448
6	2015	0.02	-0.09	0.21	27587	5659	534
7	2016	-0.02	-0.08	0.54	26607	6674	470
8	2017	0.00	0.04	0.13	23975	8307	545
9	2018	-0.01	0.05	-0.08	25858	10310	358
10	2019	0.03	0.01	0.27	25129	12564	463
11	2020	0.02	0.08	-0.03	27357	15010	468
12	2021	0.03	0.04	0.30	27533	14956	412
13	2022	-0.03	-0.06	-0.41	27641	15567	463
14	2023	-0.05	-0.02	-0.06	25278	13886	562
15	2024	0.05	0.11	0.13	5654	2696	141



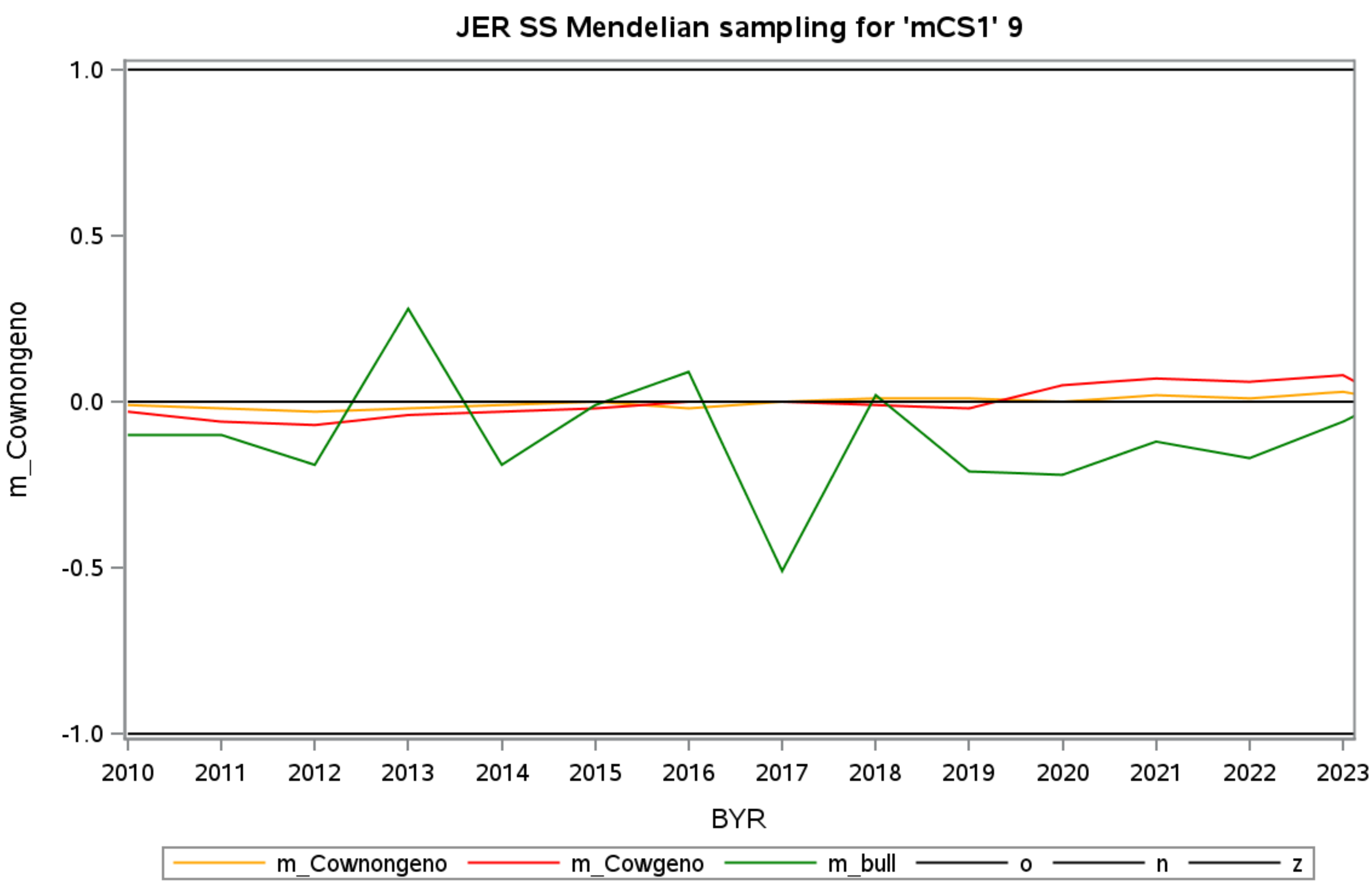
Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	0.01	0.00	-0.10	29440	2170	242
2	2011	0.06	-0.11	-0.26	29351	4004	384
3	2012	0.00	0.00	0.34	29505	4681	406
4	2013	0.03	0.05	-0.09	29348	3755	416
5	2014	0.05	0.01	-0.24	28901	4722	448
6	2015	0.03	0.20	0.29	27587	5659	534
7	2016	0.00	0.14	0.20	26607	6674	470
8	2017	0.06	0.13	-0.07	23975	8307	545
9	2018	0.01	0.17	0.03	25858	10310	358
10	2019	0.00	-0.07	-0.47	25129	12564	463
11	2020	0.02	0.12	-0.21	27357	15010	468
12	2021	0.00	0.14	-0.04	27533	14956	412
13	2022	-0.01	0.19	-0.20	27641	15567	463
14	2023	0.01	0.15	0.07	25278	13886	562
15	2024	-0.05	-0.03	0.26	5654	2696	141



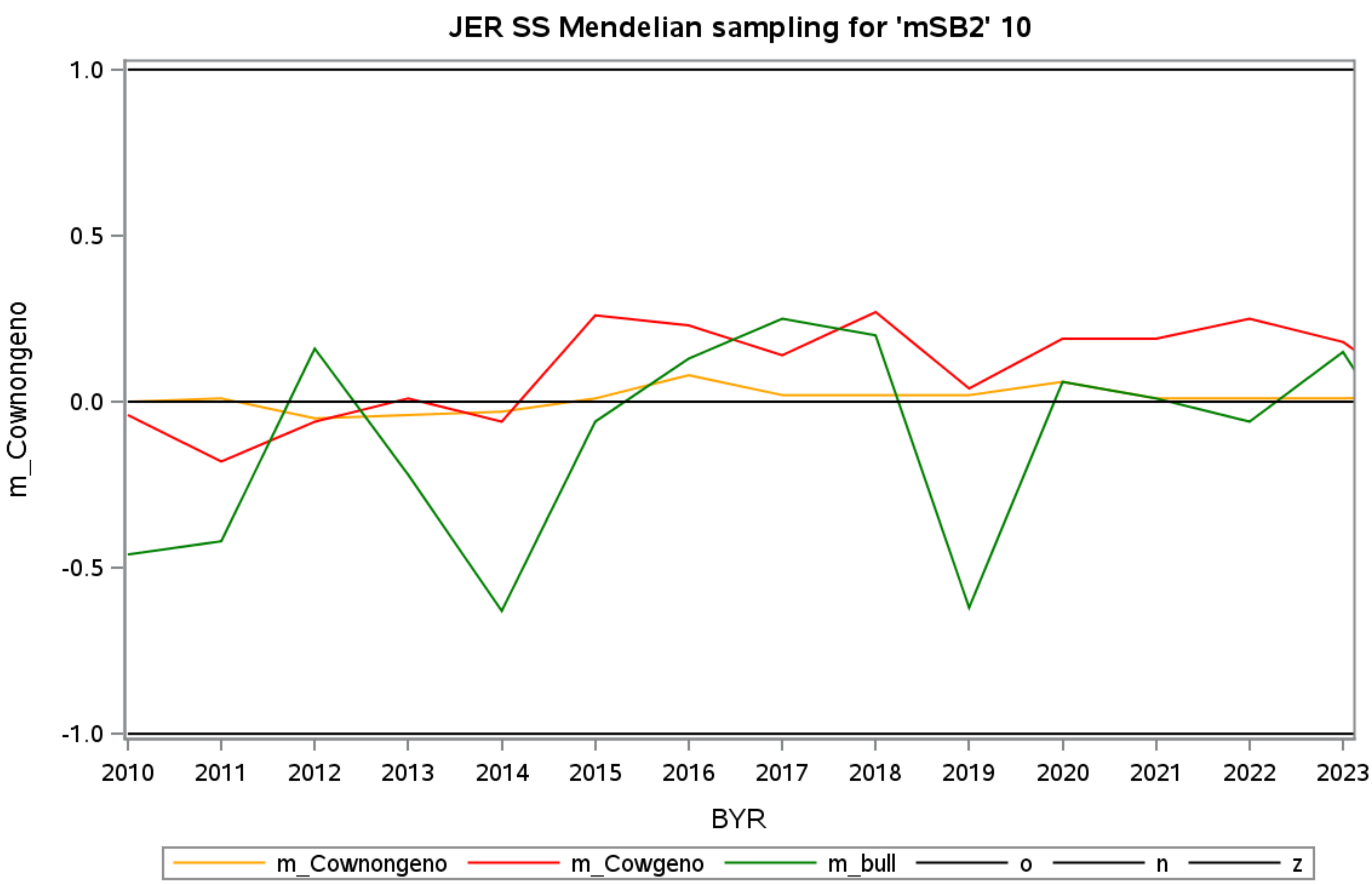
Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	-0.01	-0.08	0.20	29440	2170	242
2	2011	0.03	-0.08	-0.32	29351	4004	384
3	2012	0.03	-0.03	0.22	29505	4681	406
4	2013	0.01	0.05	-0.40	29348	3755	416
5	2014	0.01	-0.05	0.11	28901	4722	448
6	2015	0.01	0.20	0.27	27587	5659	534
7	2016	-0.02	0.11	0.08	26607	6674	470
8	2017	-0.01	0.05	-0.13	23975	8307	545
9	2018	-0.01	0.08	0.11	25858	10310	358
10	2019	0.00	0.01	-0.36	25129	12564	463
11	2020	-0.05	0.00	-0.09	27357	15010	468
12	2021	0.05	0.17	0.23	27533	14956	412
13	2022	0.05	0.17	0.06	27641	15567	463
14	2023	0.01	0.07	-0.02	25278	13886	562
15	2024	-0.02	-0.10	0.27	5654	2696	141



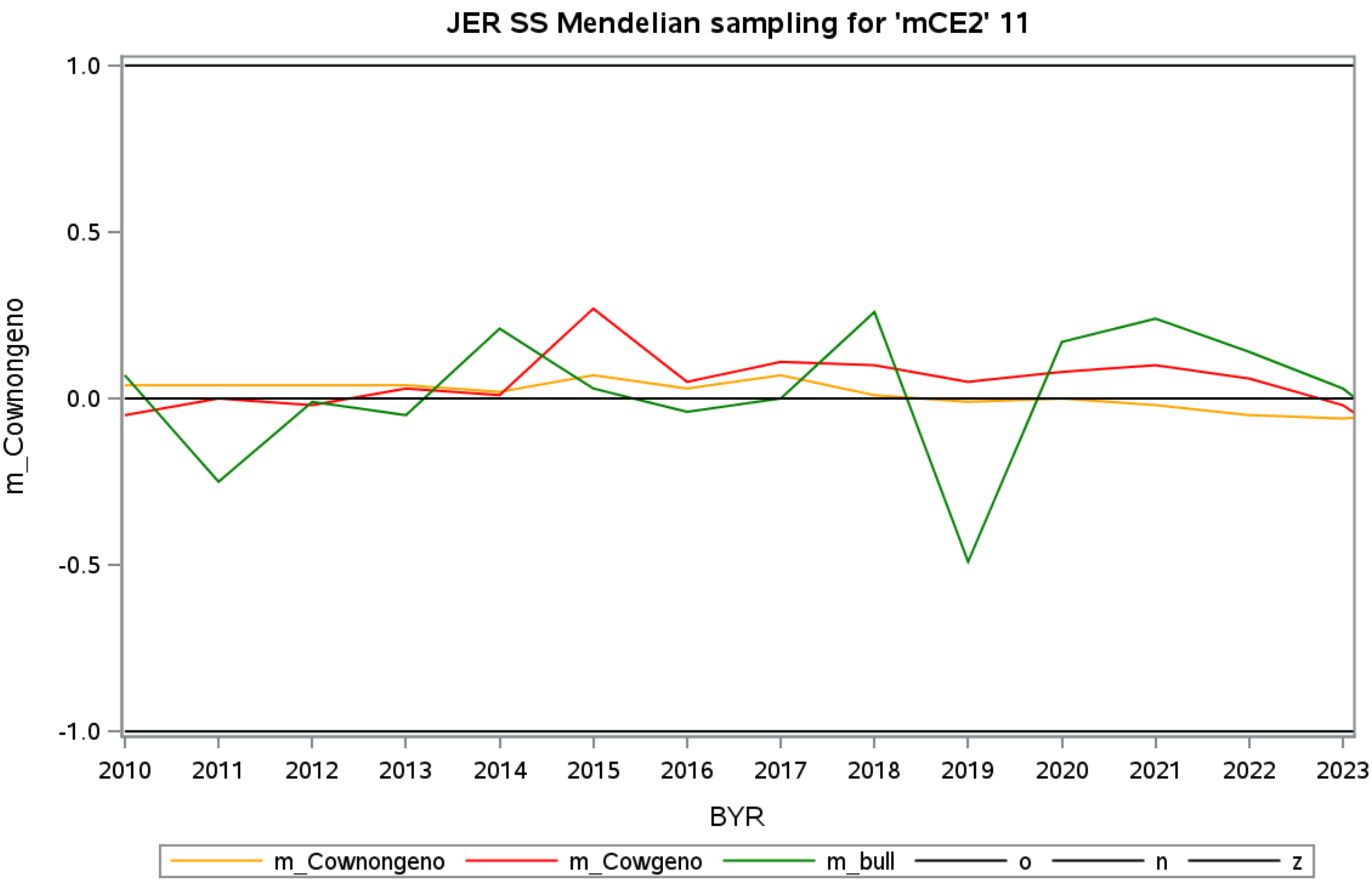
Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	-0.01	-0.03	-0.10	29440	2170	242
2	2011	-0.02	-0.06	-0.10	29351	4004	384
3	2012	-0.03	-0.07	-0.19	29505	4681	406
4	2013	-0.02	-0.04	0.28	29348	3755	416
5	2014	-0.01	-0.03	-0.19	28901	4722	448
6	2015	0.00	-0.02	-0.01	27587	5659	534
7	2016	-0.02	0.00	0.09	26607	6674	470
8	2017	0.00	0.00	-0.51	23975	8307	545
9	2018	0.01	-0.01	0.02	25858	10310	358
10	2019	0.01	-0.02	-0.21	25129	12564	463
11	2020	0.00	0.05	-0.22	27357	15010	468
12	2021	0.02	0.07	-0.12	27533	14956	412
13	2022	0.01	0.06	-0.17	27641	15567	463
14	2023	0.03	0.08	-0.06	25278	13886	562
15	2024	-0.02	-0.07	0.08	5654	2696	141



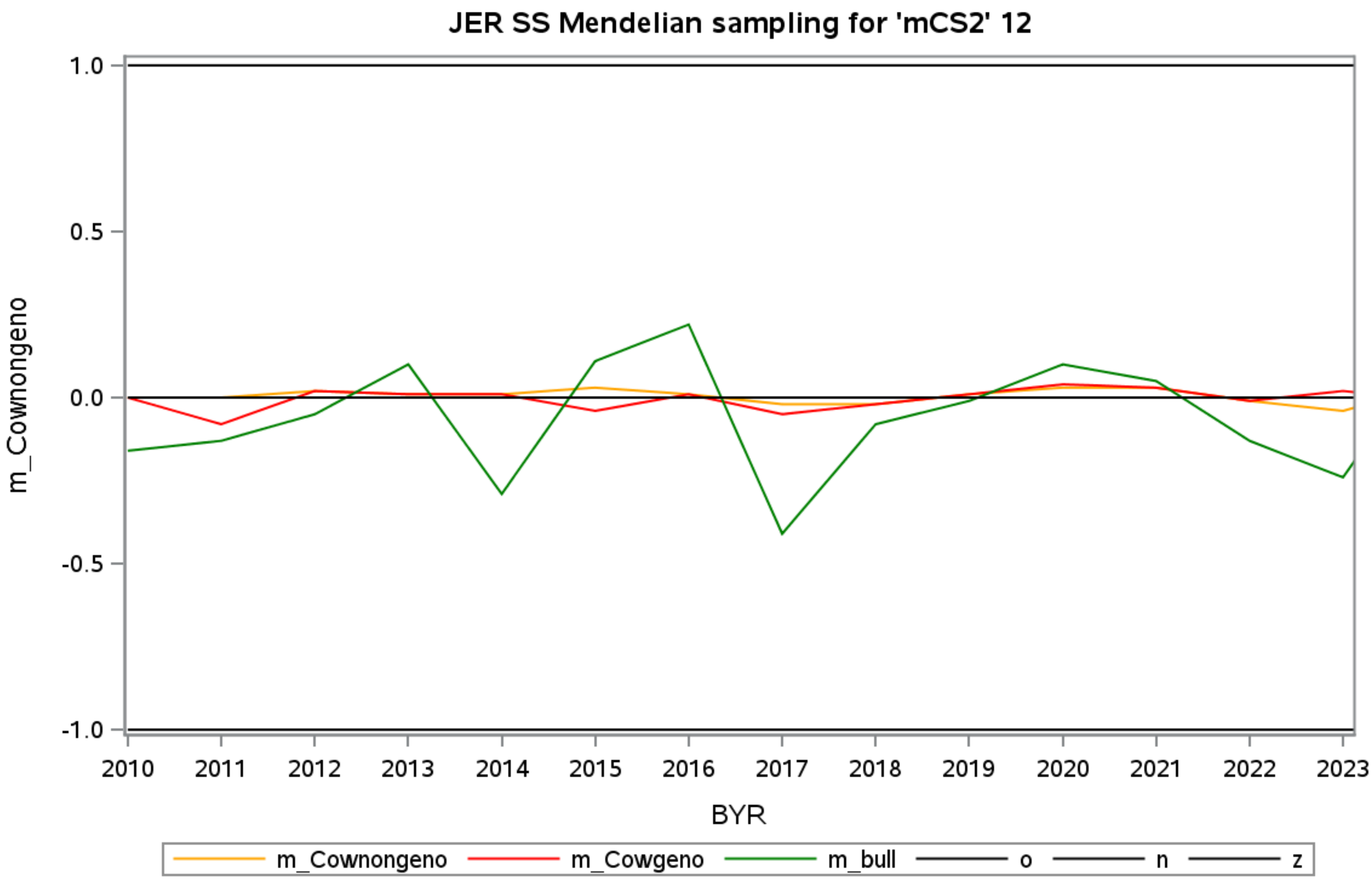
Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	0.00	-0.04	-0.46	29440	2170	242
2	2011	0.01	-0.18	-0.42	29351	4004	384
3	2012	-0.05	-0.06	0.16	29505	4681	406
4	2013	-0.04	0.01	-0.22	29348	3755	416
5	2014	-0.03	-0.06	-0.63	28901	4722	448
6	2015	0.01	0.26	-0.06	27587	5659	534
7	2016	0.08	0.23	0.13	26607	6674	470
8	2017	0.02	0.14	0.25	23975	8307	545
9	2018	0.02	0.27	0.20	25858	10310	358
10	2019	0.02	0.04	-0.62	25129	12564	463
11	2020	0.06	0.19	0.06	27357	15010	468
12	2021	0.01	0.19	0.01	27533	14956	412
13	2022	0.01	0.25	-0.06	27641	15567	463
14	2023	0.01	0.18	0.15	25278	13886	562
15	2024	0.02	-0.02	-0.29	5654	2696	141



Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	0.04	-0.05	0.07	29440	2170	242
2	2011	0.04	0.00	-0.25	29351	4004	384
3	2012	0.04	-0.02	-0.01	29505	4681	406
4	2013	0.04	0.03	-0.05	29348	3755	416
5	2014	0.02	0.01	0.21	28901	4722	448
6	2015	0.07	0.27	0.03	27587	5659	534
7	2016	0.03	0.05	-0.04	26607	6674	470
8	2017	0.07	0.11	0.00	23975	8307	545
9	2018	0.01	0.10	0.26	25858	10310	358
10	2019	-0.01	0.05	-0.49	25129	12564	463
11	2020	0.00	0.08	0.17	27357	15010	468
12	2021	-0.02	0.10	0.24	27533	14956	412
13	2022	-0.05	0.06	0.14	27641	15567	463
14	2023	-0.06	-0.02	0.03	25278	13886	562
15	2024	-0.04	-0.21	-0.19	5654	2696	141

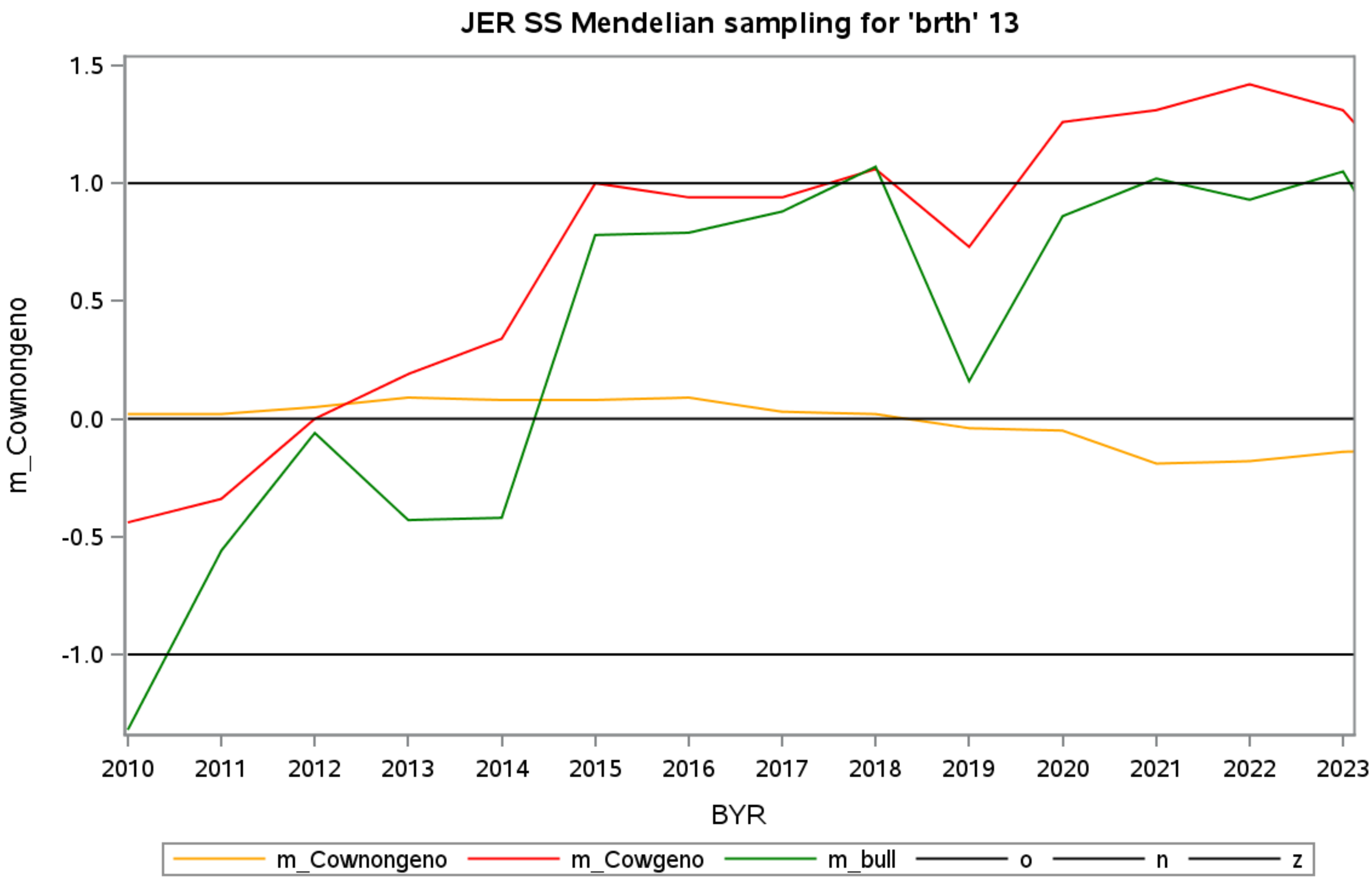


Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	0.00	0.00	-0.16	29440	2170	242
2	2011	0.00	-0.08	-0.13	29351	4004	384
3	2012	0.02	0.02	-0.05	29505	4681	406
4	2013	0.01	0.01	0.10	29348	3755	416
5	2014	0.01	0.01	-0.29	28901	4722	448
6	2015	0.03	-0.04	0.11	27587	5659	534
7	2016	0.01	0.01	0.22	26607	6674	470
8	2017	-0.02	-0.05	-0.41	23975	8307	545
9	2018	-0.02	-0.02	-0.08	25858	10310	358
10	2019	0.01	0.01	-0.01	25129	12564	463
11	2020	0.03	0.04	0.10	27357	15010	468
12	2021	0.03	0.03	0.05	27533	14956	412
13	2022	-0.01	-0.01	-0.13	27641	15567	463
14	2023	-0.04	0.02	-0.24	25278	13886	562
15	2024	0.04	-0.01	0.16	5654	2696	141

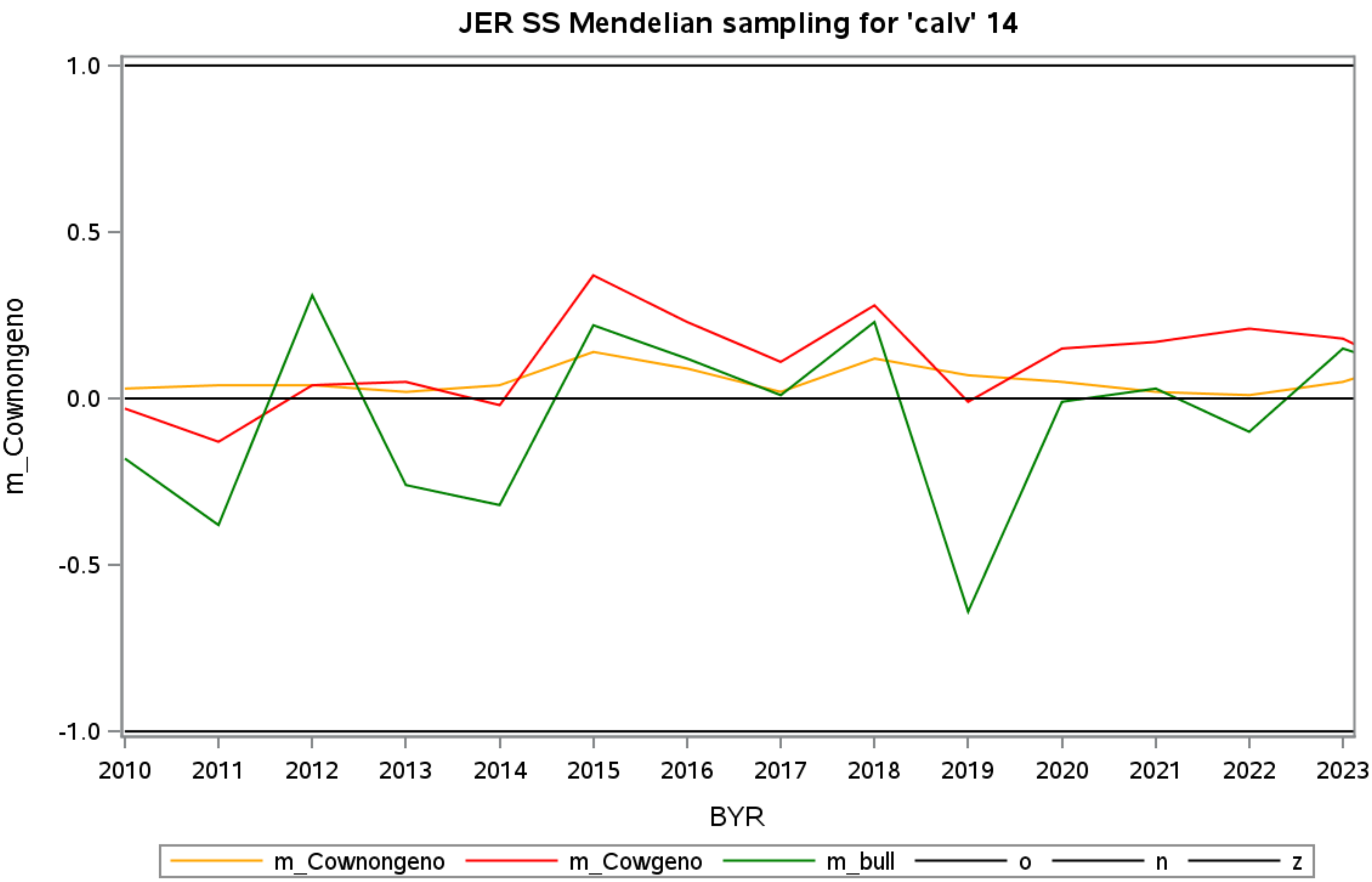


JER SS Mendelian sampling for 'brth' 13

Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	0.02	-0.44	-1.32	29440	2170	242
2	2011	0.02	-0.34	-0.56	29351	4004	384
3	2012	0.05	0.00	-0.06	29505	4681	406
4	2013	0.09	0.19	-0.43	29348	3755	416
5	2014	0.08	0.34	-0.42	28901	4722	448
6	2015	0.08	1.00	0.78	27587	5659	534
7	2016	0.09	0.94	0.79	26607	6674	470
8	2017	0.03	0.94	0.88	23975	8307	545
9	2018	0.02	1.06	1.07	25858	10310	358
10	2019	-0.04	0.73	0.16	25129	12564	463
11	2020	-0.05	1.26	0.86	27357	15010	468
12	2021	-0.19	1.31	1.02	27533	14956	412
13	2022	-0.18	1.42	0.93	27641	15567	463
14	2023	-0.14	1.31	1.05	25278	13886	562
15	2024	-0.13	0.87	0.38	5654	2696	141

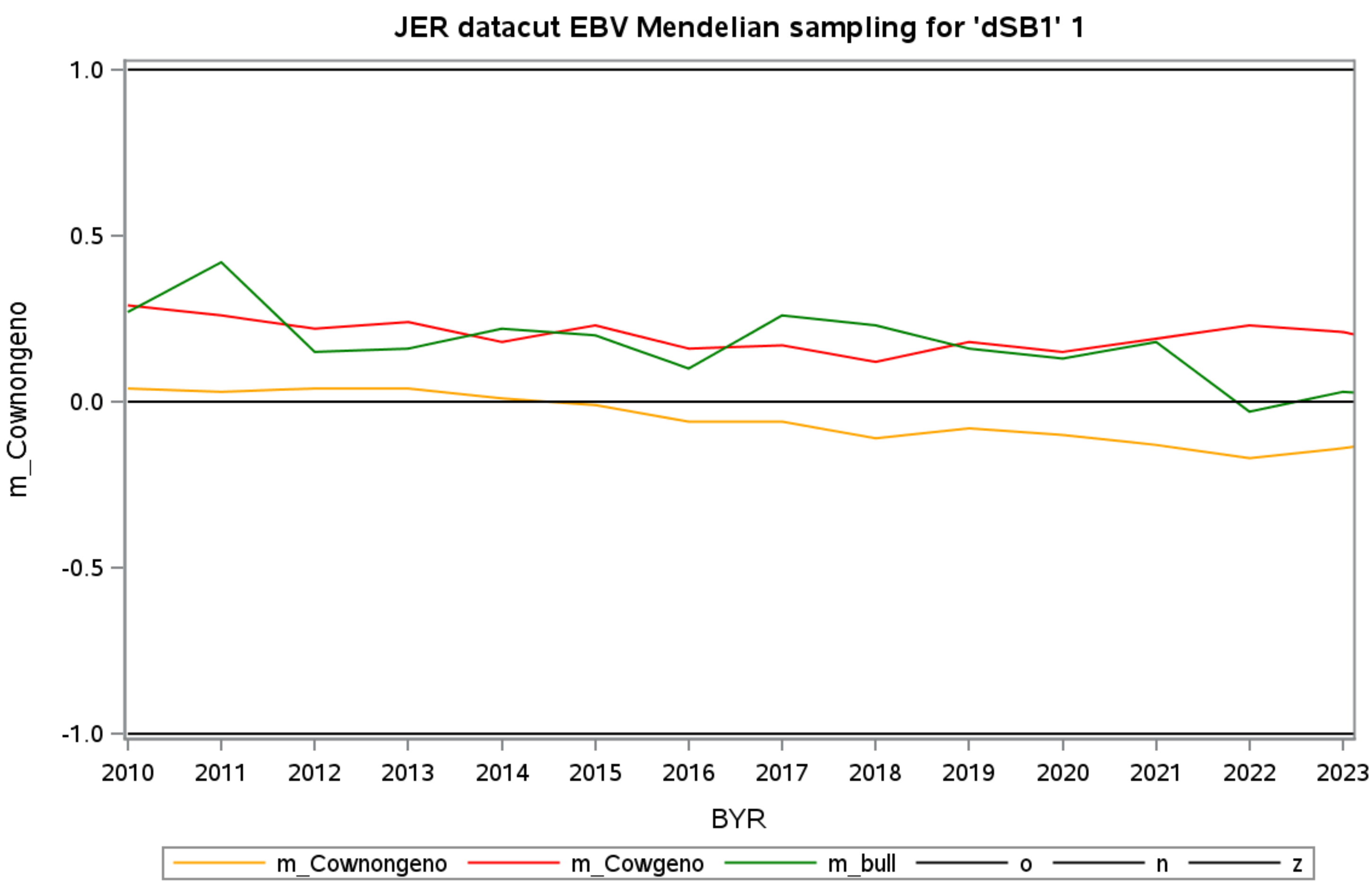


Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	0.03	-0.03	-0.18	29440	2170	242
2	2011	0.04	-0.13	-0.38	29351	4004	384
3	2012	0.04	0.04	0.31	29505	4681	406
4	2013	0.02	0.05	-0.26	29348	3755	416
5	2014	0.04	-0.02	-0.32	28901	4722	448
6	2015	0.14	0.37	0.22	27587	5659	534
7	2016	0.09	0.23	0.12	26607	6674	470
8	2017	0.02	0.11	0.01	23975	8307	545
9	2018	0.12	0.28	0.23	25858	10310	358
10	2019	0.07	-0.01	-0.64	25129	12564	463
11	2020	0.05	0.15	-0.01	27357	15010	468
12	2021	0.02	0.17	0.03	27533	14956	412
13	2022	0.01	0.21	-0.10	27641	15567	463
14	2023	0.05	0.18	0.15	25278	13886	562
15	2024	0.14	0.04	0.06	5654	2696	141



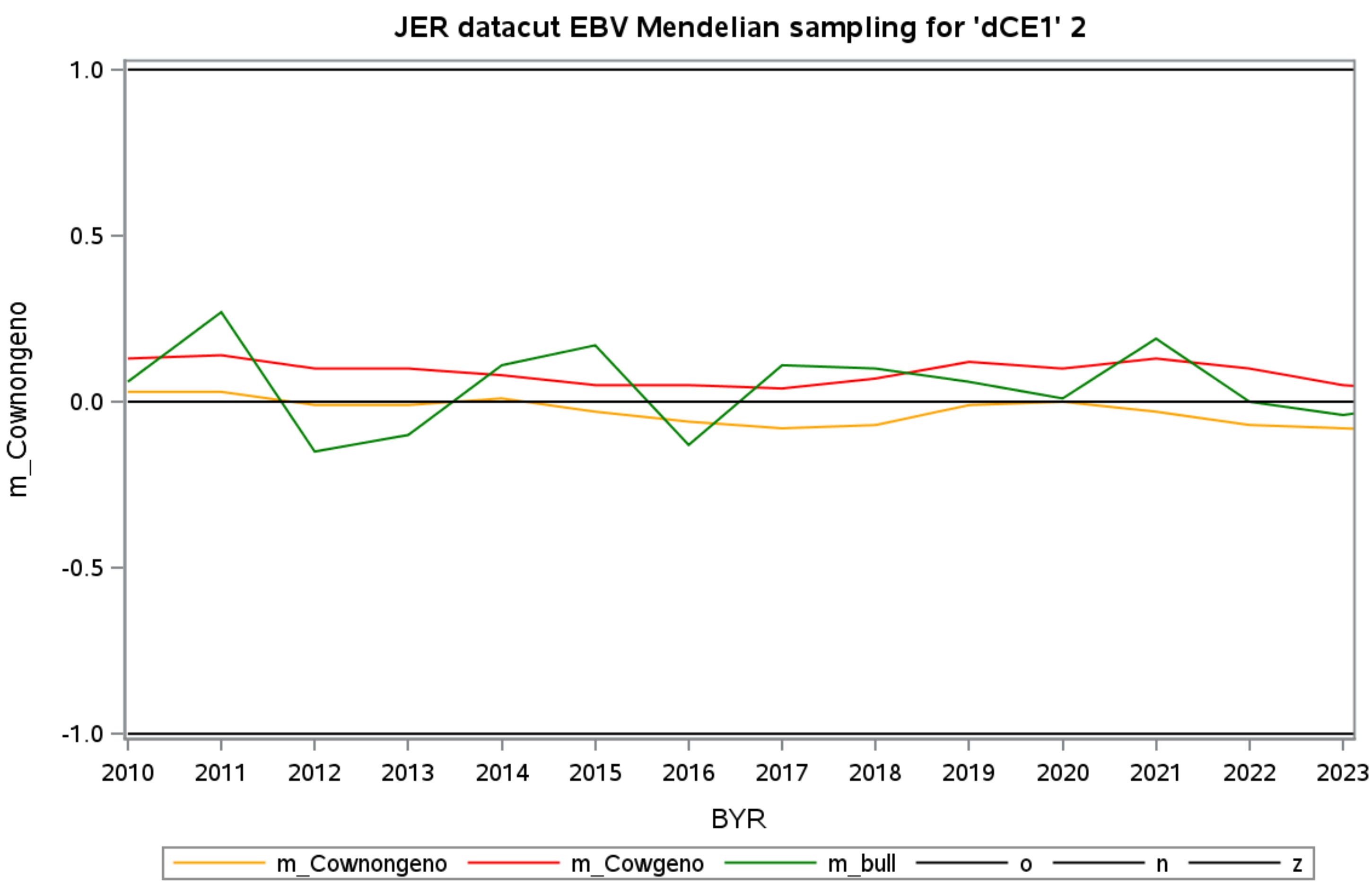
JER datacut EBV Mendelian sampling for 'dSB1' 1

Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	0.04	0.29	0.27	29440	2170	242
2	2011	0.03	0.26	0.42	29351	4004	384
3	2012	0.04	0.22	0.15	29505	4681	406
4	2013	0.04	0.24	0.16	29348	3755	416
5	2014	0.01	0.18	0.22	28901	4722	448
6	2015	-0.01	0.23	0.20	27587	5659	534
7	2016	-0.06	0.16	0.10	26607	6674	470
8	2017	-0.06	0.17	0.26	23975	8307	545
9	2018	-0.11	0.12	0.23	25858	10310	358
10	2019	-0.08	0.18	0.16	25129	12564	463
11	2020	-0.10	0.15	0.13	27357	15010	468
12	2021	-0.13	0.19	0.18	27533	14956	412
13	2022	-0.17	0.23	-0.03	27641	15567	463
14	2023	-0.14	0.21	0.03	25278	13886	562
15	2024	-0.10	0.15	0.01	5654	2696	141

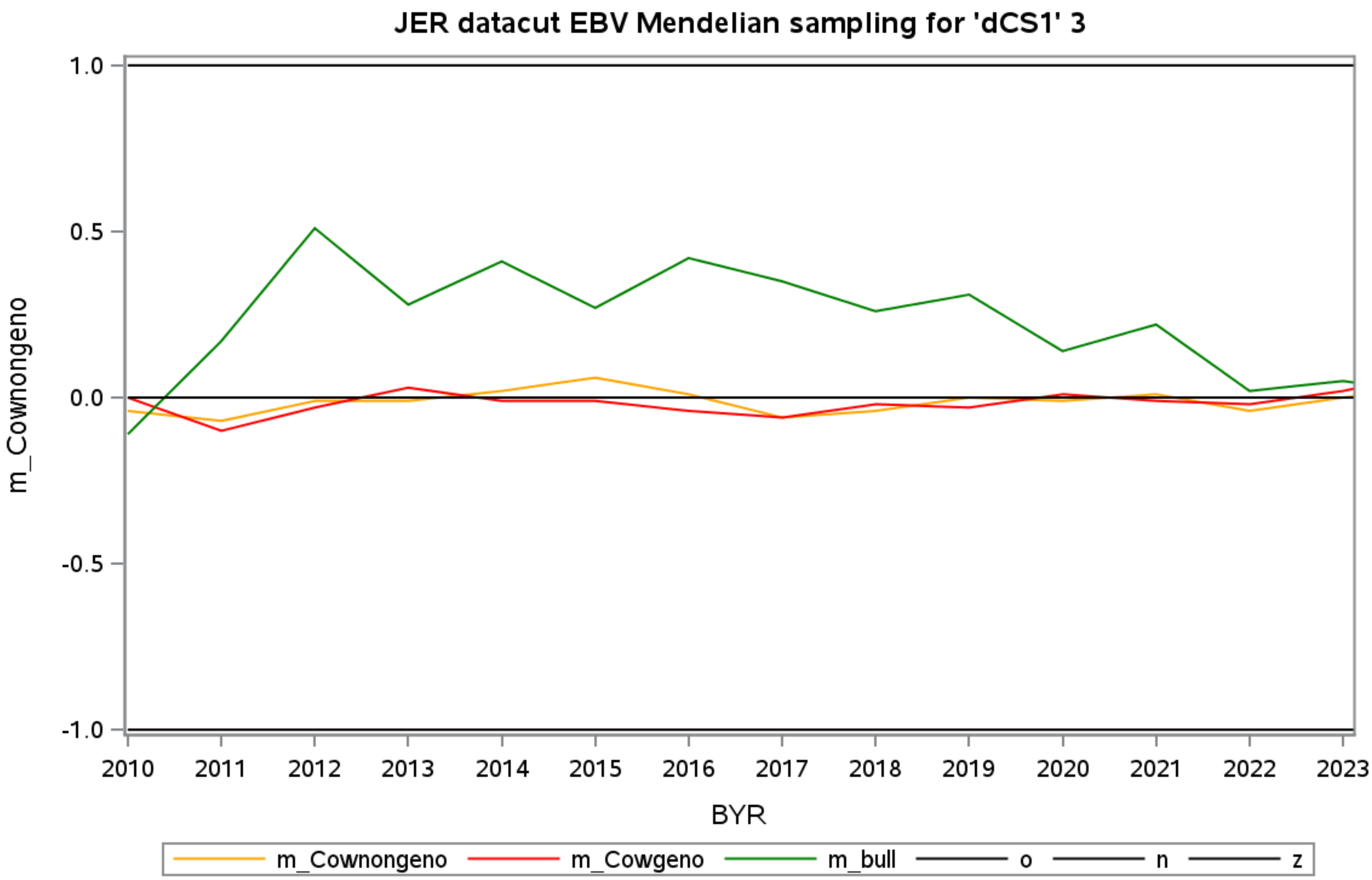


JER datacut EBV Mendelian sampling for 'dCE1' 2

Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	0.03	0.13	0.06	29440	2170	242
2	2011	0.03	0.14	0.27	29351	4004	384
3	2012	-0.01	0.10	-0.15	29505	4681	406
4	2013	-0.01	0.10	-0.10	29348	3755	416
5	2014	0.01	0.08	0.11	28901	4722	448
6	2015	-0.03	0.05	0.17	27587	5659	534
7	2016	-0.06	0.05	-0.13	26607	6674	470
8	2017	-0.08	0.04	0.11	23975	8307	545
9	2018	-0.07	0.07	0.10	25858	10310	358
10	2019	-0.01	0.12	0.06	25129	12564	463
11	2020	0.00	0.10	0.01	27357	15010	468
12	2021	-0.03	0.13	0.19	27533	14956	412
13	2022	-0.07	0.10	0.00	27641	15567	463
14	2023	-0.08	0.05	-0.04	25278	13886	562
15	2024	-0.09	0.03	0.00	5654	2696	141

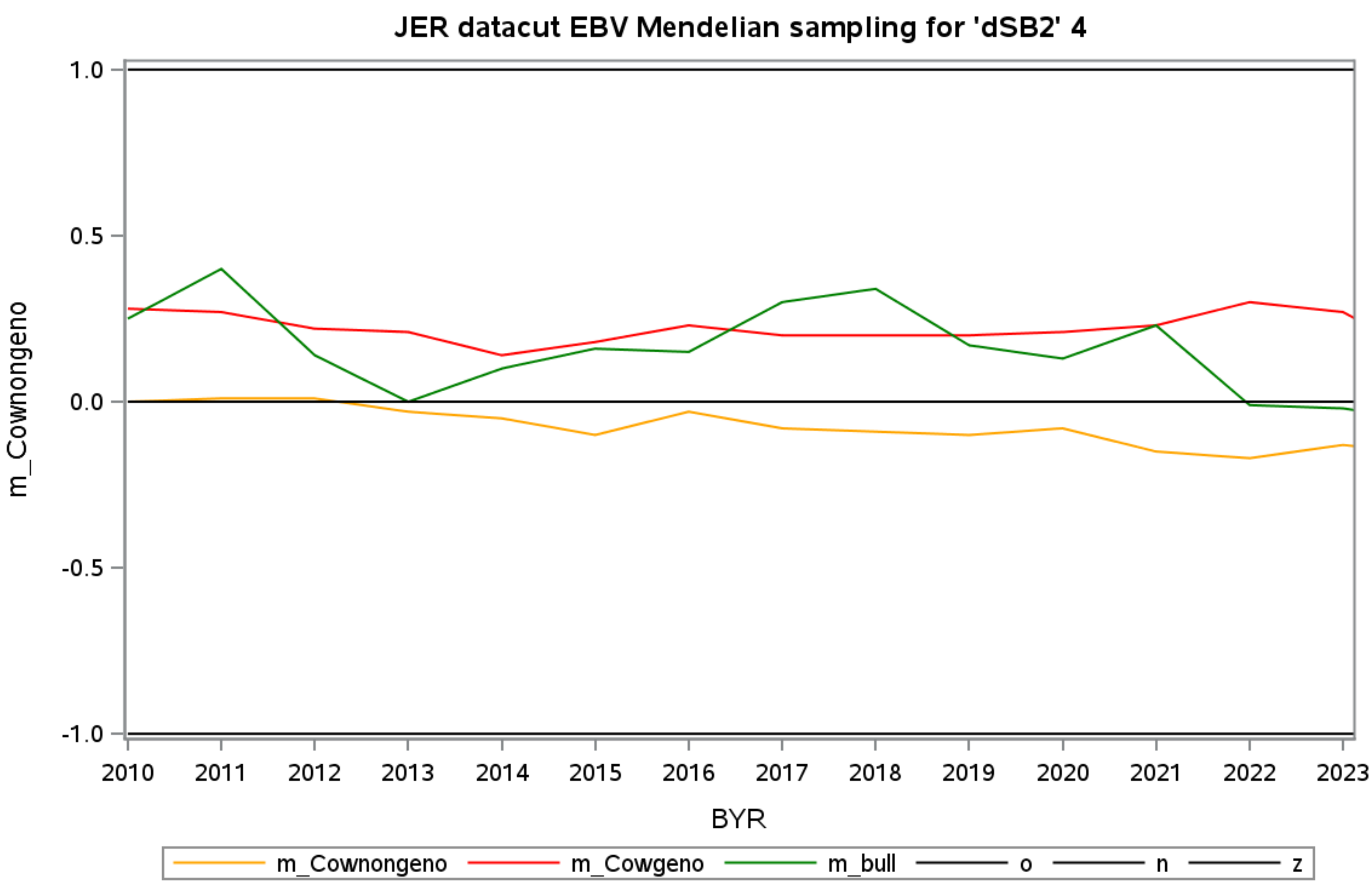


Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	-0.04	0.00	-0.11	29440	2170	242
2	2011	-0.07	-0.10	0.17	29351	4004	384
3	2012	-0.01	-0.03	0.51	29505	4681	406
4	2013	-0.01	0.03	0.28	29348	3755	416
5	2014	0.02	-0.01	0.41	28901	4722	448
6	2015	0.06	-0.01	0.27	27587	5659	534
7	2016	0.01	-0.04	0.42	26607	6674	470
8	2017	-0.06	-0.06	0.35	23975	8307	545
9	2018	-0.04	-0.02	0.26	25858	10310	358
10	2019	0.00	-0.03	0.31	25129	12564	463
11	2020	-0.01	0.01	0.14	27357	15010	468
12	2021	0.01	-0.01	0.22	27533	14956	412
13	2022	-0.04	-0.02	0.02	27641	15567	463
14	2023	0.00	0.02	0.05	25278	13886	562
15	2024	0.04	0.08	0.01	5654	2696	141



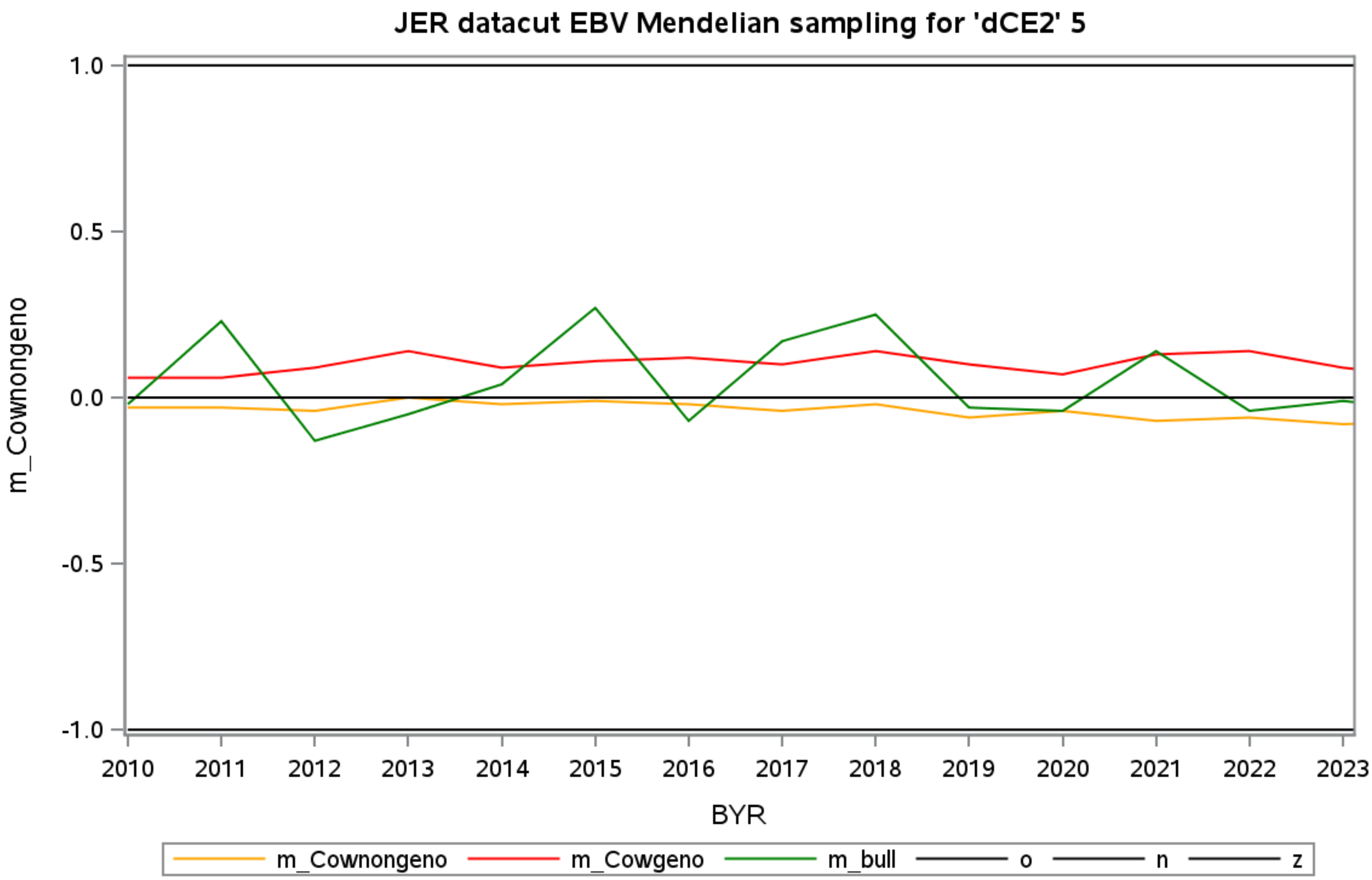
JER datacut EBV Mendelian sampling for 'dSB2' 4

Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	0.00	0.28	0.25	29440	2170	242
2	2011	0.01	0.27	0.40	29351	4004	384
3	2012	0.01	0.22	0.14	29505	4681	406
4	2013	-0.03	0.21	0.00	29348	3755	416
5	2014	-0.05	0.14	0.10	28901	4722	448
6	2015	-0.10	0.18	0.16	27587	5659	534
7	2016	-0.03	0.23	0.15	26607	6674	470
8	2017	-0.08	0.20	0.30	23975	8307	545
9	2018	-0.09	0.20	0.34	25858	10310	358
10	2019	-0.10	0.20	0.17	25129	12564	463
11	2020	-0.08	0.21	0.13	27357	15010	468
12	2021	-0.15	0.23	0.23	27533	14956	412
13	2022	-0.17	0.30	-0.01	27641	15567	463
14	2023	-0.13	0.27	-0.02	25278	13886	562
15	2024	-0.16	0.12	-0.06	5654	2696	141



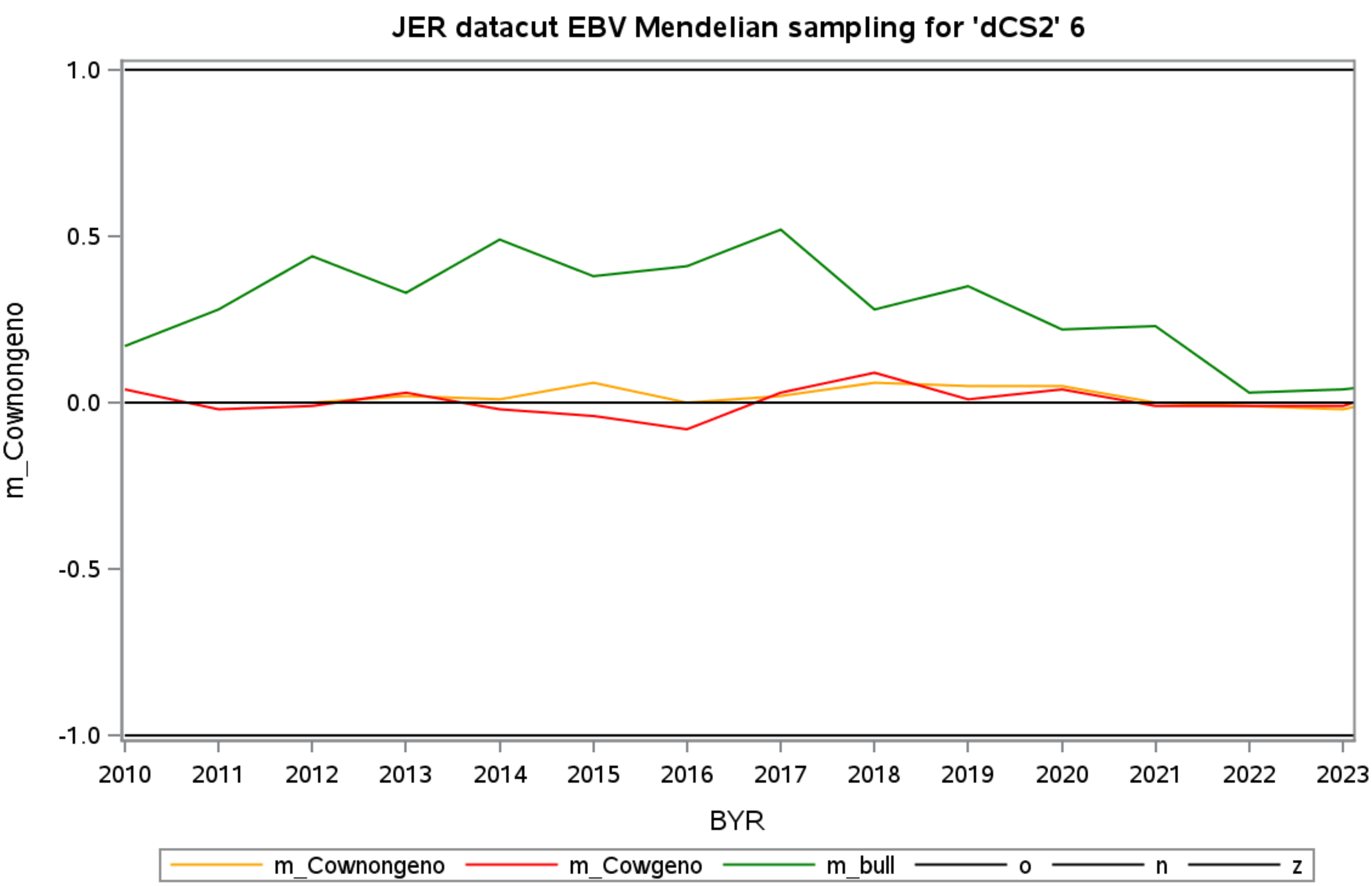
JER datacut EBV Mendelian sampling for 'dCE2' 5

Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	-0.03	0.06	-0.02	29440	2170	242
2	2011	-0.03	0.06	0.23	29351	4004	384
3	2012	-0.04	0.09	-0.13	29505	4681	406
4	2013	0.00	0.14	-0.05	29348	3755	416
5	2014	-0.02	0.09	0.04	28901	4722	448
6	2015	-0.01	0.11	0.27	27587	5659	534
7	2016	-0.02	0.12	-0.07	26607	6674	470
8	2017	-0.04	0.10	0.17	23975	8307	545
9	2018	-0.02	0.14	0.25	25858	10310	358
10	2019	-0.06	0.10	-0.03	25129	12564	463
11	2020	-0.04	0.07	-0.04	27357	15010	468
12	2021	-0.07	0.13	0.14	27533	14956	412
13	2022	-0.06	0.14	-0.04	27641	15567	463
14	2023	-0.08	0.09	-0.01	25278	13886	562
15	2024	-0.07	0.06	-0.04	5654	2696	141



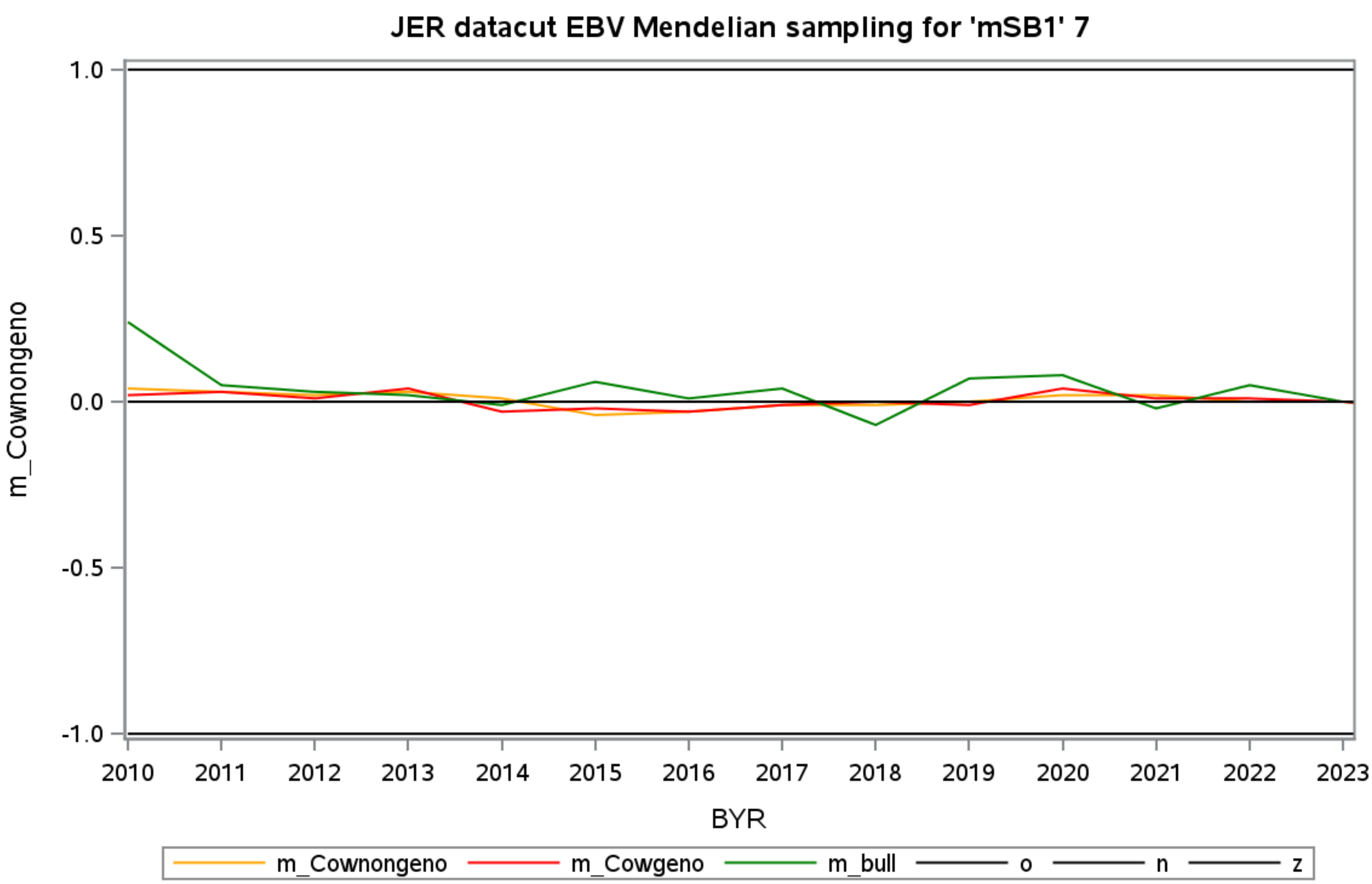
JER datacut EBV Mendelian sampling for 'dCS2' 6

Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	0.00	0.04	0.17	29440	2170	242
2	2011	0.00	-0.02	0.28	29351	4004	384
3	2012	0.00	-0.01	0.44	29505	4681	406
4	2013	0.02	0.03	0.33	29348	3755	416
5	2014	0.01	-0.02	0.49	28901	4722	448
6	2015	0.06	-0.04	0.38	27587	5659	534
7	2016	0.00	-0.08	0.41	26607	6674	470
8	2017	0.02	0.03	0.52	23975	8307	545
9	2018	0.06	0.09	0.28	25858	10310	358
10	2019	0.05	0.01	0.35	25129	12564	463
11	2020	0.05	0.04	0.22	27357	15010	468
12	2021	0.00	-0.01	0.23	27533	14956	412
13	2022	-0.01	-0.01	0.03	27641	15567	463
14	2023	-0.02	-0.01	0.04	25278	13886	562
15	2024	0.04	0.08	0.07	5654	2696	141



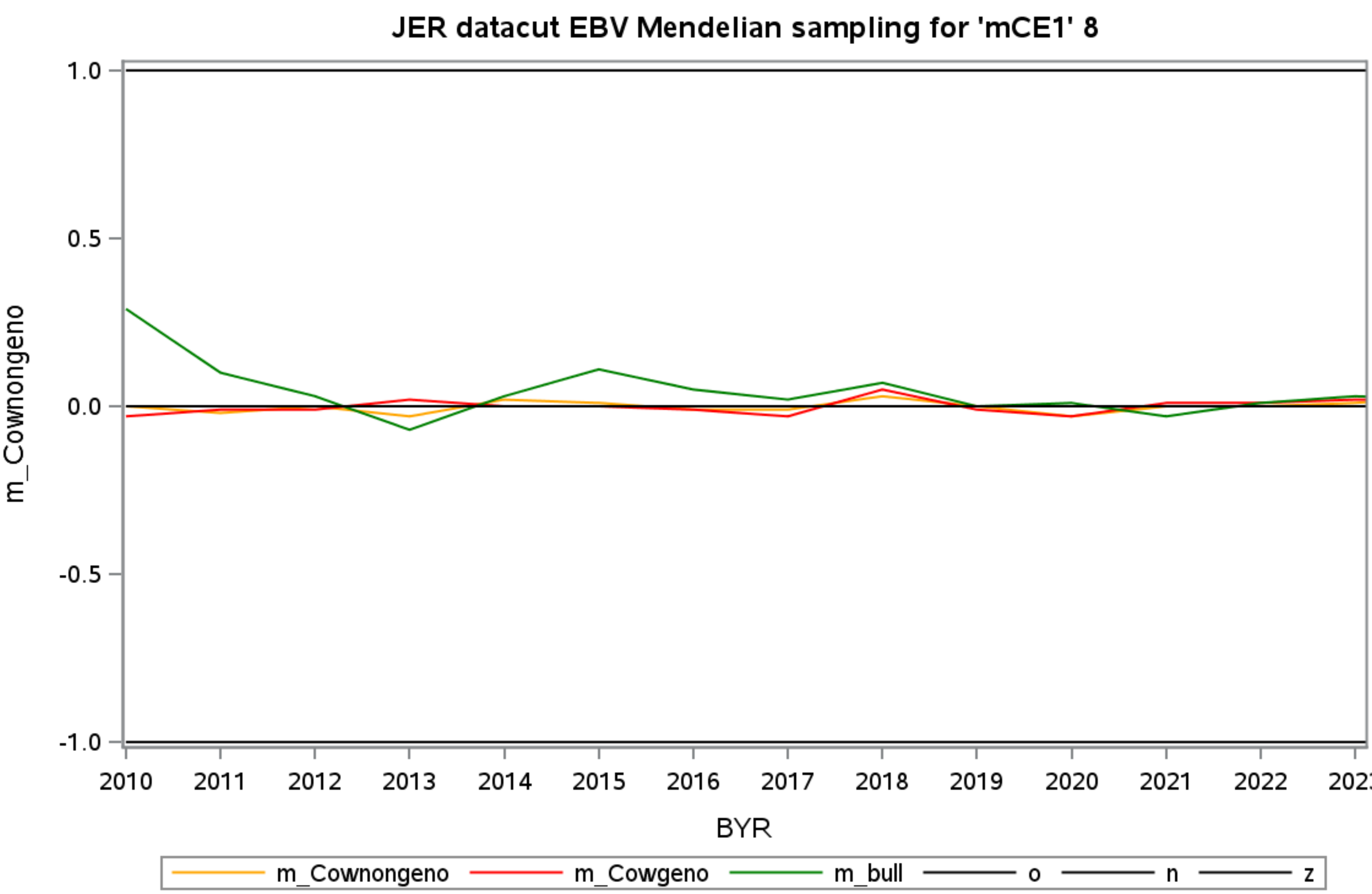
JER datacut EBV Mendelian sampling for 'mSB1' 7

Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	0.04	0.02	0.24	29440	2170	242
2	2011	0.03	0.03	0.05	29351	4004	384
3	2012	0.02	0.01	0.03	29505	4681	406
4	2013	0.03	0.04	0.02	29348	3755	416
5	2014	0.01	-0.03	-0.01	28901	4722	448
6	2015	-0.04	-0.02	0.06	27587	5659	534
7	2016	-0.03	-0.03	0.01	26607	6674	470
8	2017	-0.01	-0.01	0.04	23975	8307	545
9	2018	-0.01	0.00	-0.07	25858	10310	358
10	2019	0.00	-0.01	0.07	25129	12564	463
11	2020	0.02	0.04	0.08	27357	15010	468
12	2021	0.02	0.01	-0.02	27533	14956	412
13	2022	0.00	0.01	0.05	27641	15567	463
14	2023	0.00	0.00	0.00	25278	13886	562
15	2024	-0.01	-0.03	-0.01	5654	2696	141

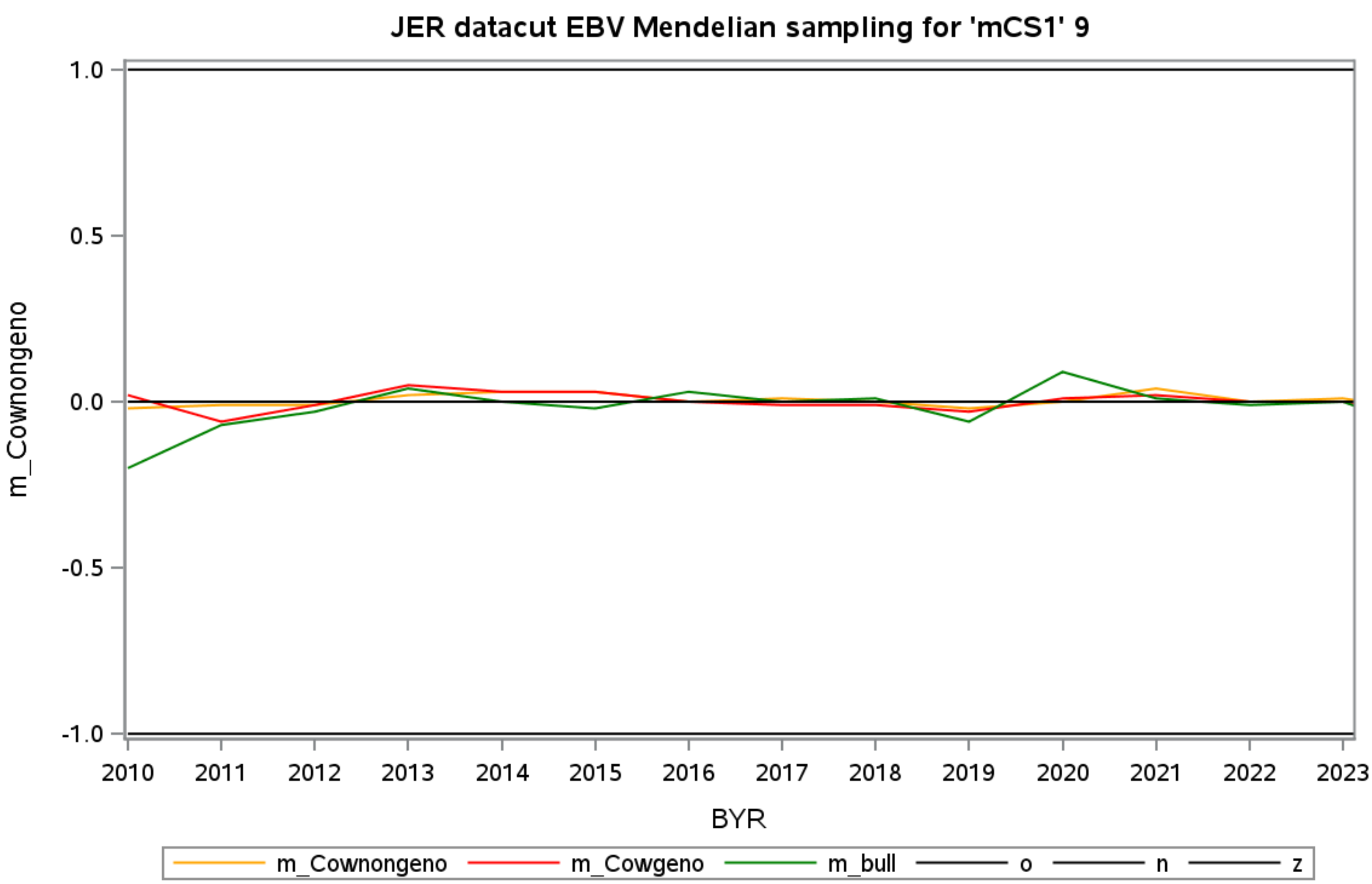


JER datacut EBV Mendelian sampling for 'mCE1' 8

Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	0.00	-0.03	0.29	29440	2170	242
2	2011	-0.02	-0.01	0.10	29351	4004	384
3	2012	0.00	-0.01	0.03	29505	4681	406
4	2013	-0.03	0.02	-0.07	29348	3755	416
5	2014	0.02	0.00	0.03	28901	4722	448
6	2015	0.01	0.00	0.11	27587	5659	534
7	2016	-0.01	-0.01	0.05	26607	6674	470
8	2017	-0.01	-0.03	0.02	23975	8307	545
9	2018	0.03	0.05	0.07	25858	10310	358
10	2019	0.00	-0.01	0.00	25129	12564	463
11	2020	-0.03	-0.03	0.01	27357	15010	468
12	2021	0.00	0.01	-0.03	27533	14956	412
13	2022	0.00	0.01	0.01	27641	15567	463
14	2023	0.01	0.02	0.03	25278	13886	562
15	2024	0.03	0.02	0.02	5654	2696	141

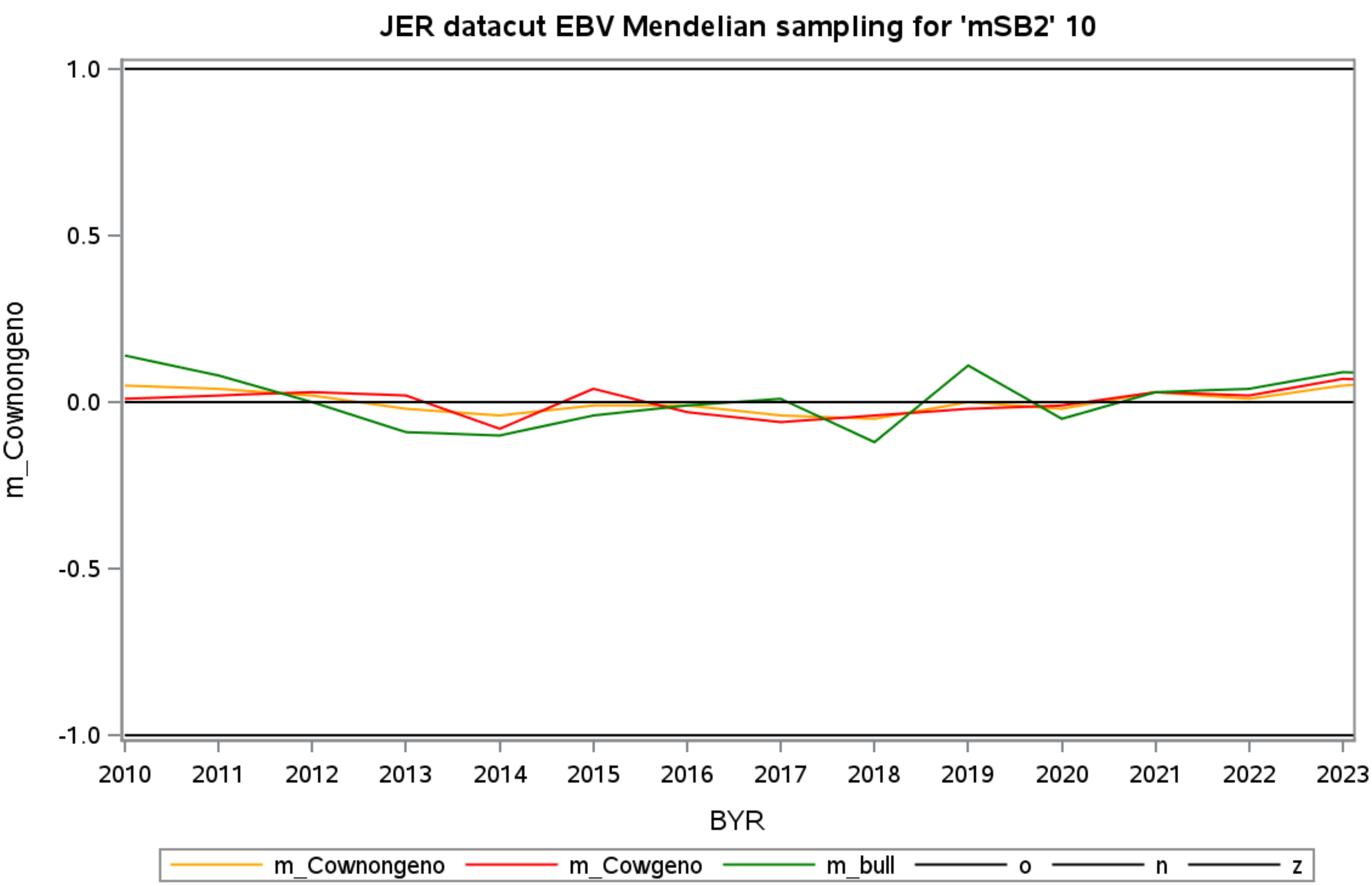


Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	-0.02	0.02	-0.20	29440	2170	242
2	2011	-0.01	-0.06	-0.07	29351	4004	384
3	2012	-0.01	-0.01	-0.03	29505	4681	406
4	2013	0.02	0.05	0.04	29348	3755	416
5	2014	0.03	0.03	0.00	28901	4722	448
6	2015	0.03	0.03	-0.02	27587	5659	534
7	2016	0.00	0.00	0.03	26607	6674	470
8	2017	0.01	-0.01	0.00	23975	8307	545
9	2018	0.00	-0.01	0.01	25858	10310	358
10	2019	-0.02	-0.03	-0.06	25129	12564	463
11	2020	0.00	0.01	0.09	27357	15010	468
12	2021	0.04	0.02	0.01	27533	14956	412
13	2022	0.00	0.00	-0.01	27641	15567	463
14	2023	0.01	0.00	0.00	25278	13886	562
15	2024	-0.03	-0.03	-0.10	5654	2696	141



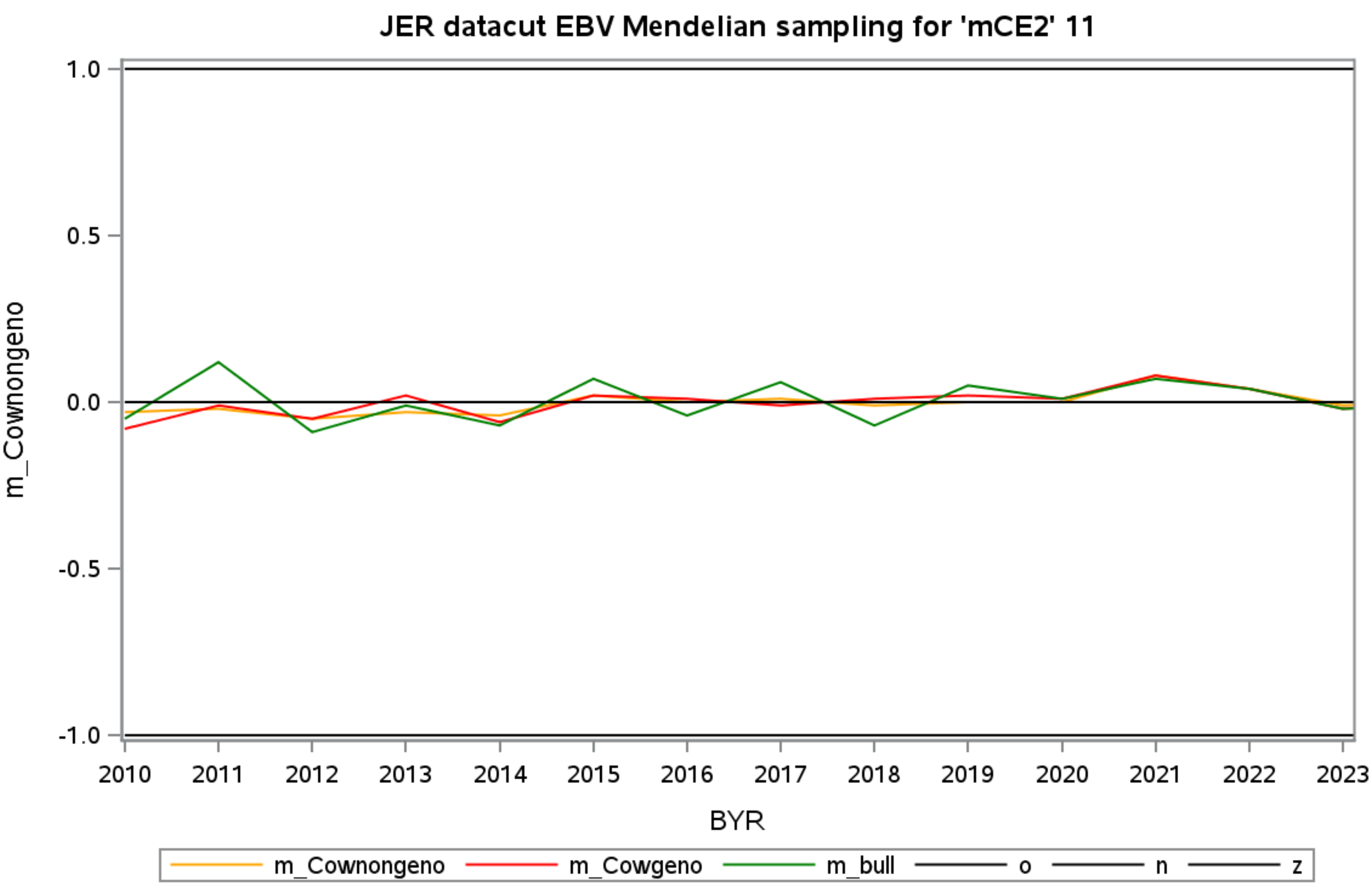
JER datacut EBV Mendelian sampling for 'mSB2' 10

Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	0.05	0.01	0.14	29440	2170	242
2	2011	0.04	0.02	0.08	29351	4004	384
3	2012	0.02	0.03	0.00	29505	4681	406
4	2013	-0.02	0.02	-0.09	29348	3755	416
5	2014	-0.04	-0.08	-0.10	28901	4722	448
6	2015	-0.01	0.04	-0.04	27587	5659	534
7	2016	-0.01	-0.03	-0.01	26607	6674	470
8	2017	-0.04	-0.06	0.01	23975	8307	545
9	2018	-0.05	-0.04	-0.12	25858	10310	358
10	2019	0.00	-0.02	0.11	25129	12564	463
11	2020	-0.02	-0.01	-0.05	27357	15010	468
12	2021	0.03	0.03	0.03	27533	14956	412
13	2022	0.01	0.02	0.04	27641	15567	463
14	2023	0.05	0.07	0.09	25278	13886	562
15	2024	0.07	0.06	0.08	5654	2696	141



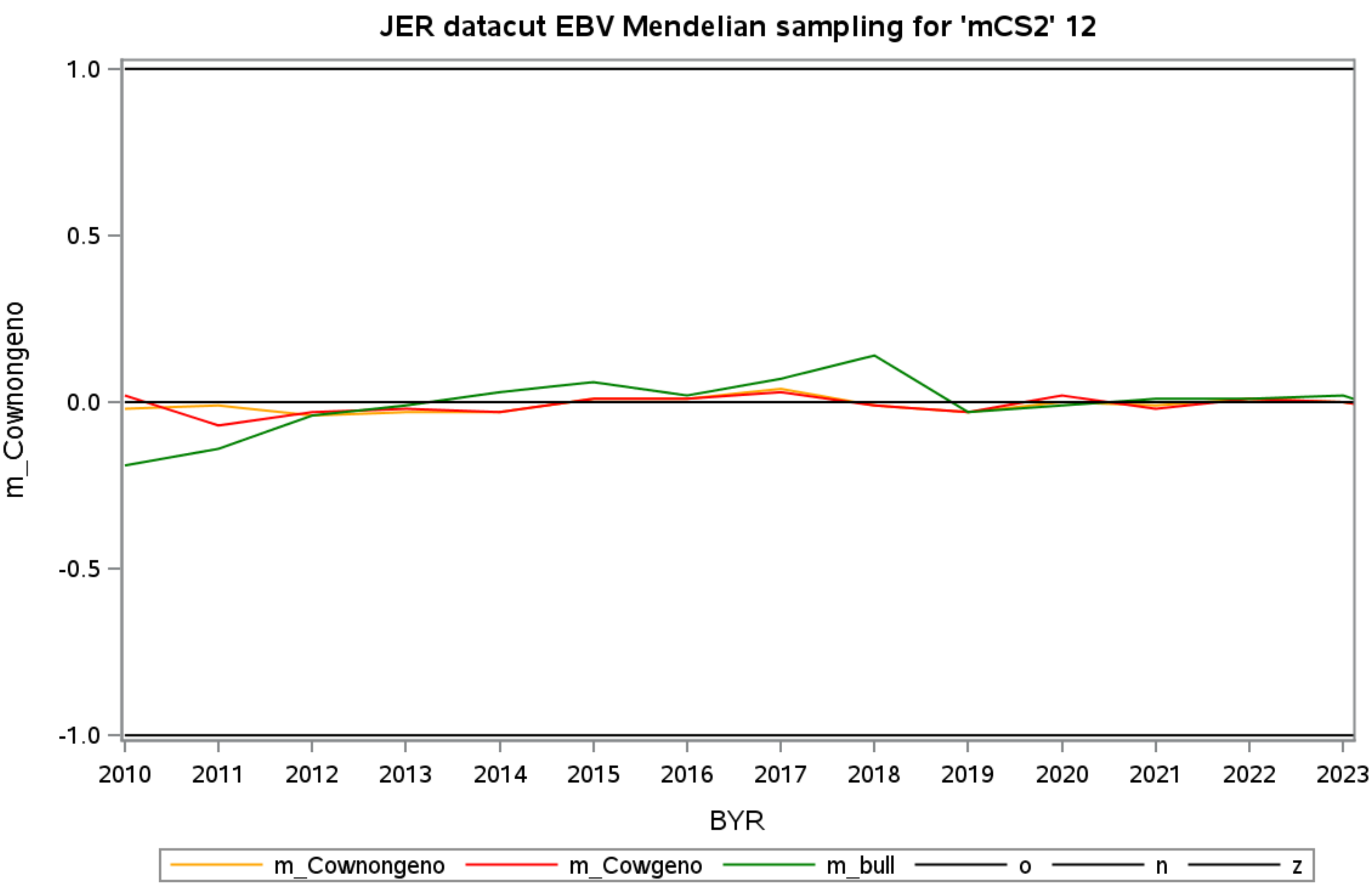
JER datacut EBV Mendelian sampling for 'mCE2' 11

Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	-0.03	-0.08	-0.05	29440	2170	242
2	2011	-0.02	-0.01	0.12	29351	4004	384
3	2012	-0.05	-0.05	-0.09	29505	4681	406
4	2013	-0.03	0.02	-0.01	29348	3755	416
5	2014	-0.04	-0.06	-0.07	28901	4722	448
6	2015	0.02	0.02	0.07	27587	5659	534
7	2016	0.00	0.01	-0.04	26607	6674	470
8	2017	0.01	-0.01	0.06	23975	8307	545
9	2018	-0.01	0.01	-0.07	25858	10310	358
10	2019	0.00	0.02	0.05	25129	12564	463
11	2020	0.00	0.01	0.01	27357	15010	468
12	2021	0.08	0.08	0.07	27533	14956	412
13	2022	0.04	0.04	0.04	27641	15567	463
14	2023	-0.01	-0.02	-0.02	25278	13886	562
15	2024	0.00	0.00	-0.01	5654	2696	141

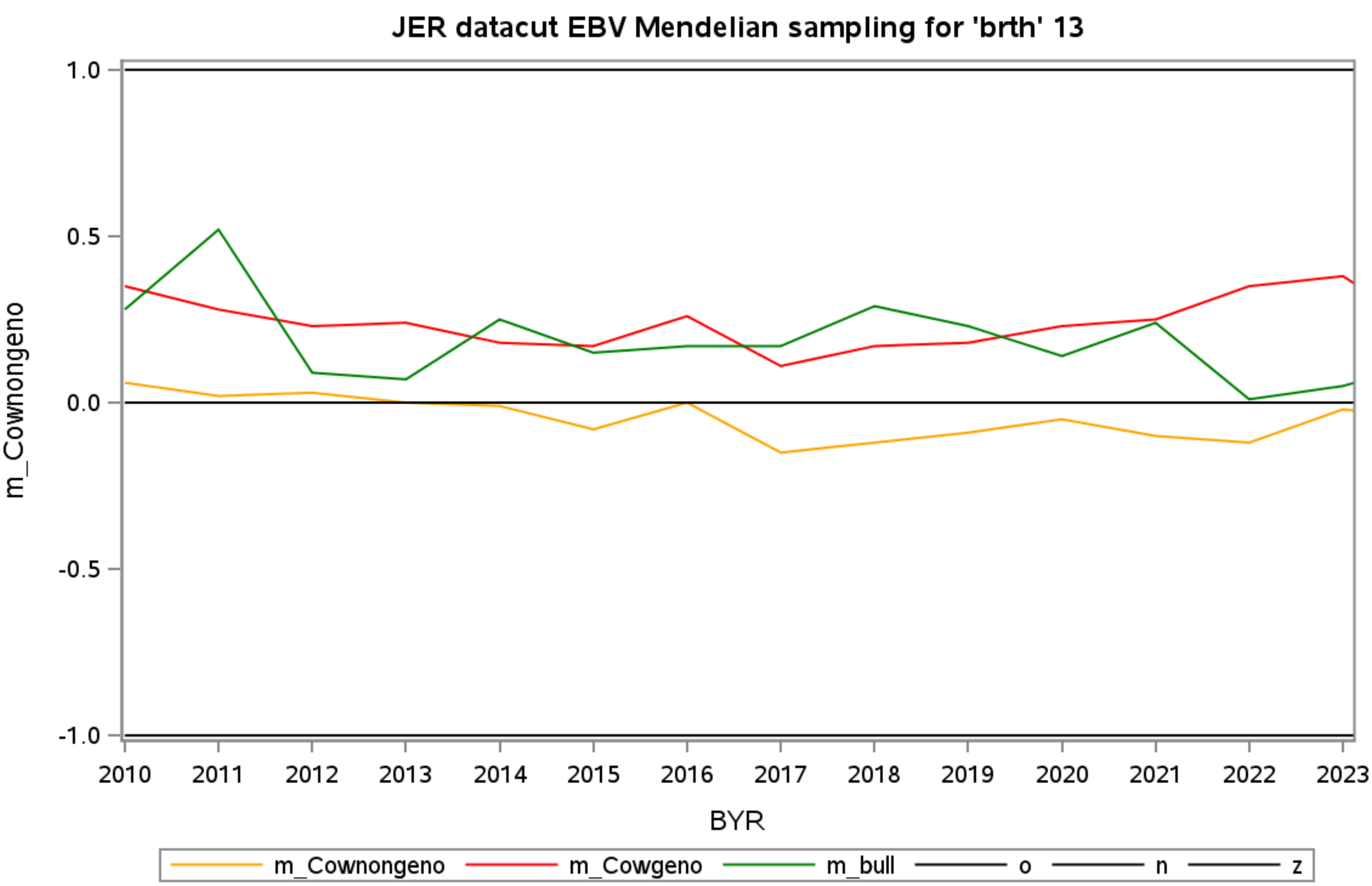


JER datacut EBV Mendelian sampling for 'mCS2' 12

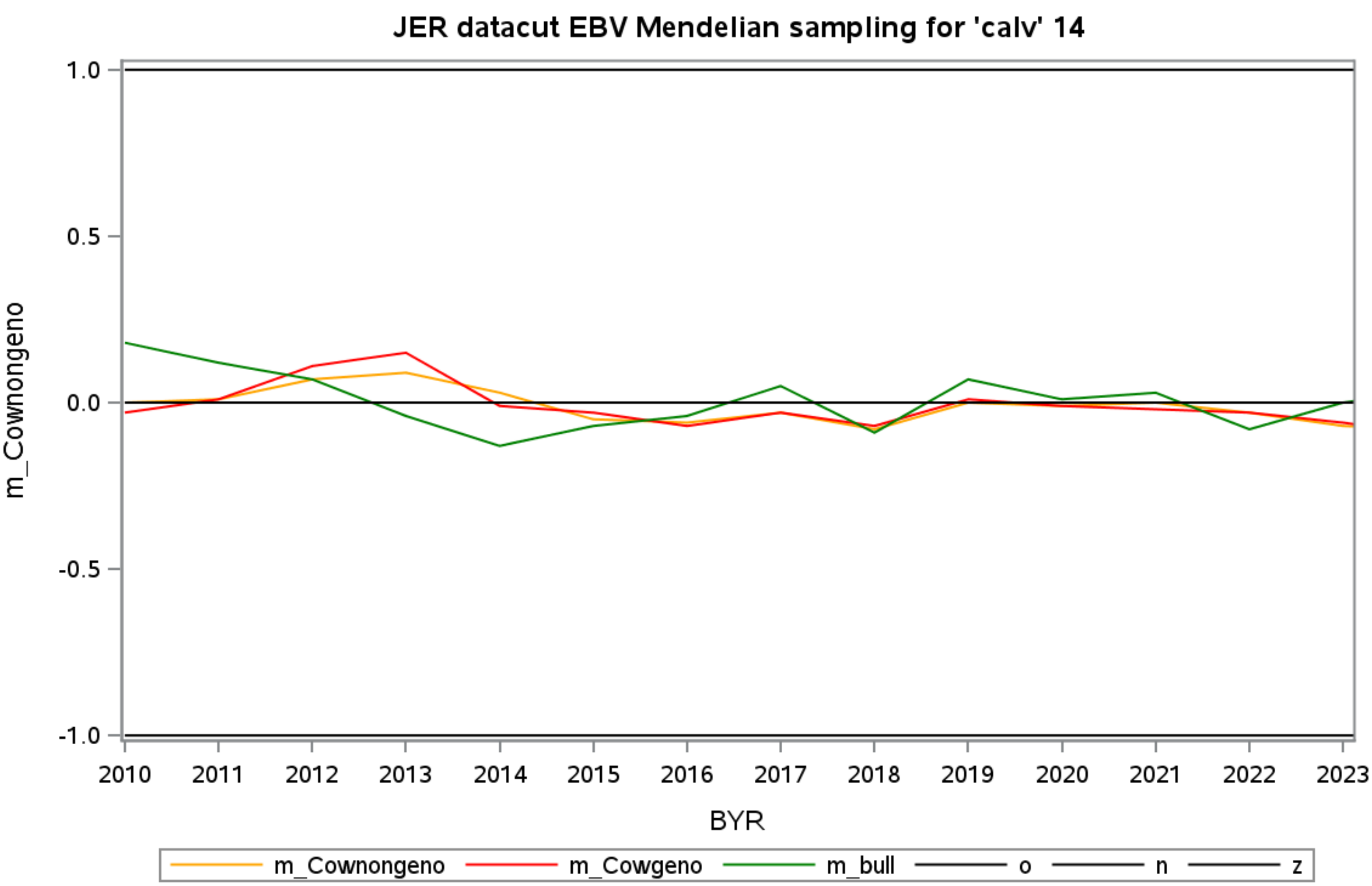
Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	-0.02	0.02	-0.19	29440	2170	242
2	2011	-0.01	-0.07	-0.14	29351	4004	384
3	2012	-0.04	-0.03	-0.04	29505	4681	406
4	2013	-0.03	-0.02	-0.01	29348	3755	416
5	2014	-0.03	-0.03	0.03	28901	4722	448
6	2015	0.01	0.01	0.06	27587	5659	534
7	2016	0.01	0.01	0.02	26607	6674	470
8	2017	0.04	0.03	0.07	23975	8307	545
9	2018	-0.01	-0.01	0.14	25858	10310	358
10	2019	-0.03	-0.03	-0.03	25129	12564	463
11	2020	0.00	0.02	-0.01	27357	15010	468
12	2021	-0.01	-0.02	0.01	27533	14956	412
13	2022	0.01	0.01	0.01	27641	15567	463
14	2023	0.00	0.00	0.02	25278	13886	562
15	2024	-0.04	-0.04	-0.07	5654	2696	141



Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	0.06	0.35	0.28	29440	2170	242
2	2011	0.02	0.28	0.52	29351	4004	384
3	2012	0.03	0.23	0.09	29505	4681	406
4	2013	0.00	0.24	0.07	29348	3755	416
5	2014	-0.01	0.18	0.25	28901	4722	448
6	2015	-0.08	0.17	0.15	27587	5659	534
7	2016	0.00	0.26	0.17	26607	6674	470
8	2017	-0.15	0.11	0.17	23975	8307	545
9	2018	-0.12	0.17	0.29	25858	10310	358
10	2019	-0.09	0.18	0.23	25129	12564	463
11	2020	-0.05	0.23	0.14	27357	15010	468
12	2021	-0.10	0.25	0.24	27533	14956	412
13	2022	-0.12	0.35	0.01	27641	15567	463
14	2023	-0.02	0.38	0.05	25278	13886	562
15	2024	-0.05	0.20	0.13	5654	2696	141

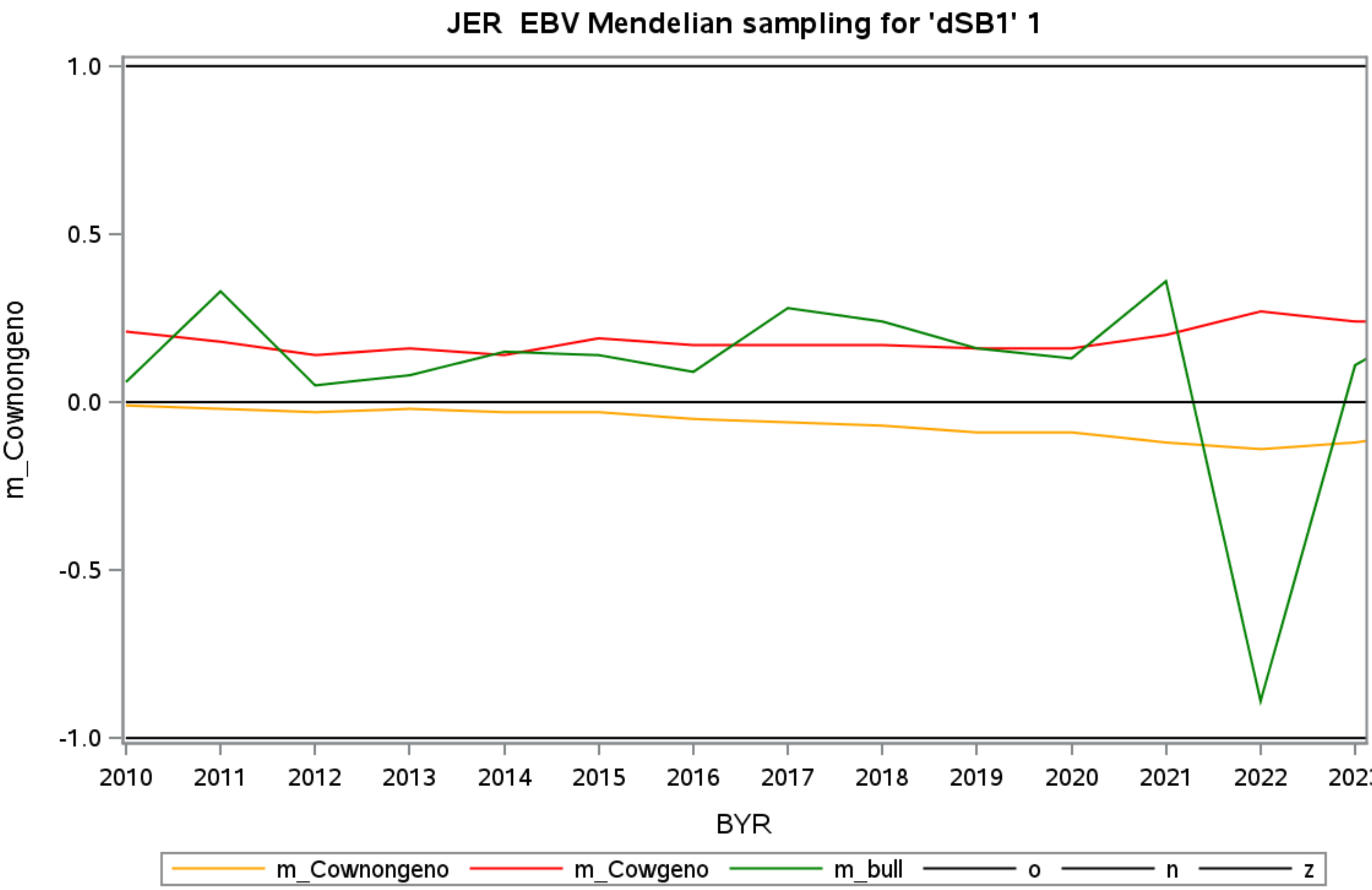


Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	0.00	-0.03	0.18	29440	2170	242
2	2011	0.01	0.01	0.12	29351	4004	384
3	2012	0.07	0.11	0.07	29505	4681	406
4	2013	0.09	0.15	-0.04	29348	3755	416
5	2014	0.03	-0.01	-0.13	28901	4722	448
6	2015	-0.05	-0.03	-0.07	27587	5659	534
7	2016	-0.06	-0.07	-0.04	26607	6674	470
8	2017	-0.03	-0.03	0.05	23975	8307	545
9	2018	-0.08	-0.07	-0.09	25858	10310	358
10	2019	0.00	0.01	0.07	25129	12564	463
11	2020	-0.01	-0.01	0.01	27357	15010	468
12	2021	0.00	-0.02	0.03	27533	14956	412
13	2022	-0.03	-0.03	-0.08	27641	15567	463
14	2023	-0.07	-0.06	0.00	25278	13886	562
15	2024	-0.08	-0.10	0.04	5654	2696	141



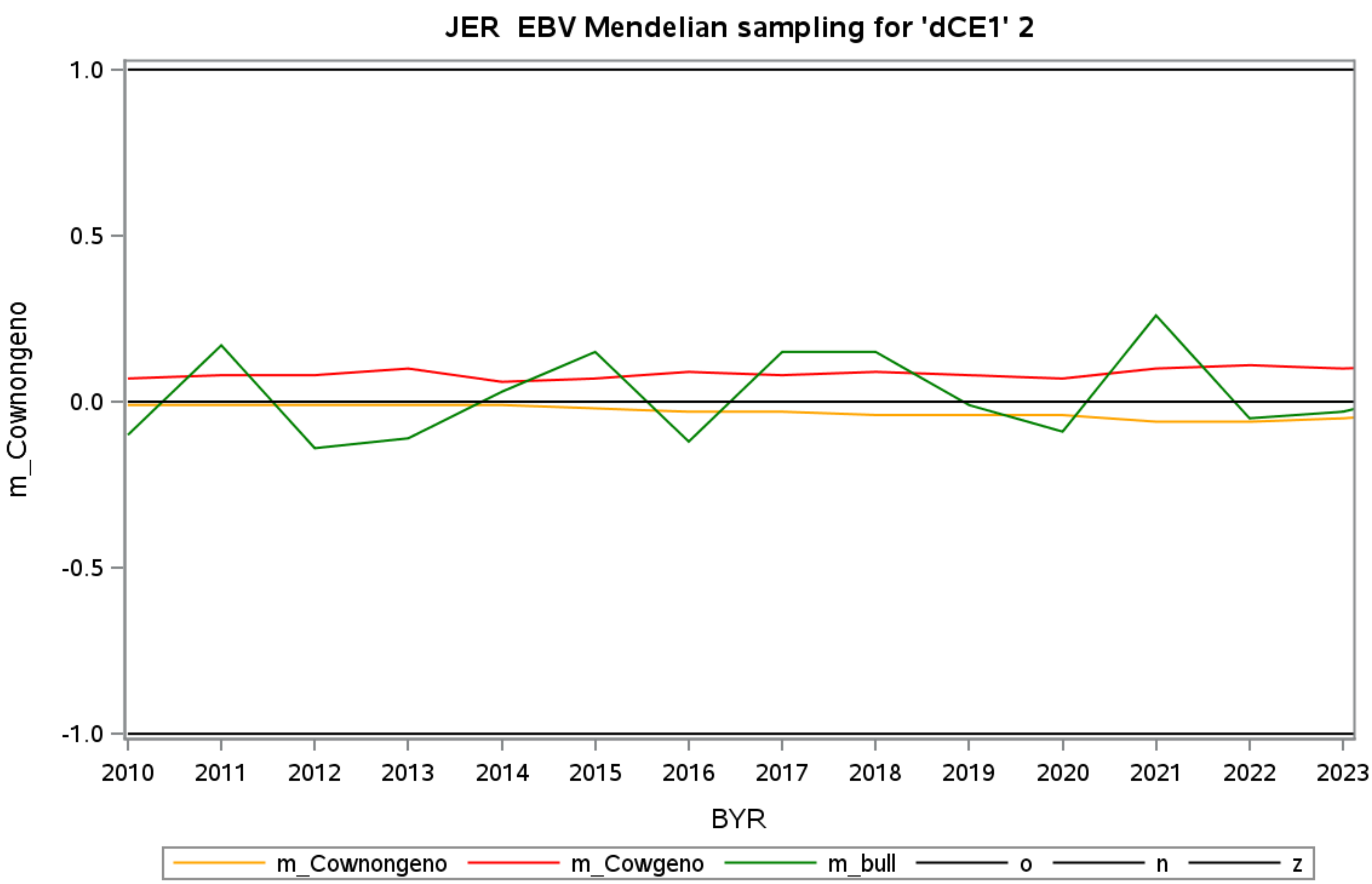
JER EBV Mendelian sampling for 'dSB1' 1

Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	-0.01	0.21	0.06	29715	2167	220
2	2011	-0.02	0.18	0.33	29681	3993	353
3	2012	-0.03	0.14	0.05	29702	4608	367
4	2013	-0.02	0.16	0.08	29568	3660	370
5	2014	-0.03	0.14	0.15	29101	4600	399
6	2015	-0.03	0.19	0.14	27738	5420	475
7	2016	-0.05	0.17	0.09	26744	6366	403
8	2017	-0.06	0.17	0.28	24092	7913	462
9	2018	-0.07	0.17	0.24	25980	9788	305
10	2019	-0.09	0.16	0.16	25214	11878	361
11	2020	-0.09	0.16	0.13	27465	14029	339
12	2021	-0.12	0.20	0.36	27617	13915	215
13	2022	-0.14	0.27	-0.89	27730	14123	14
14	2023	-0.12	0.24	0.11	25356	12417	11
15	2024	-0.08	0.24	0.27	5657	1766	1



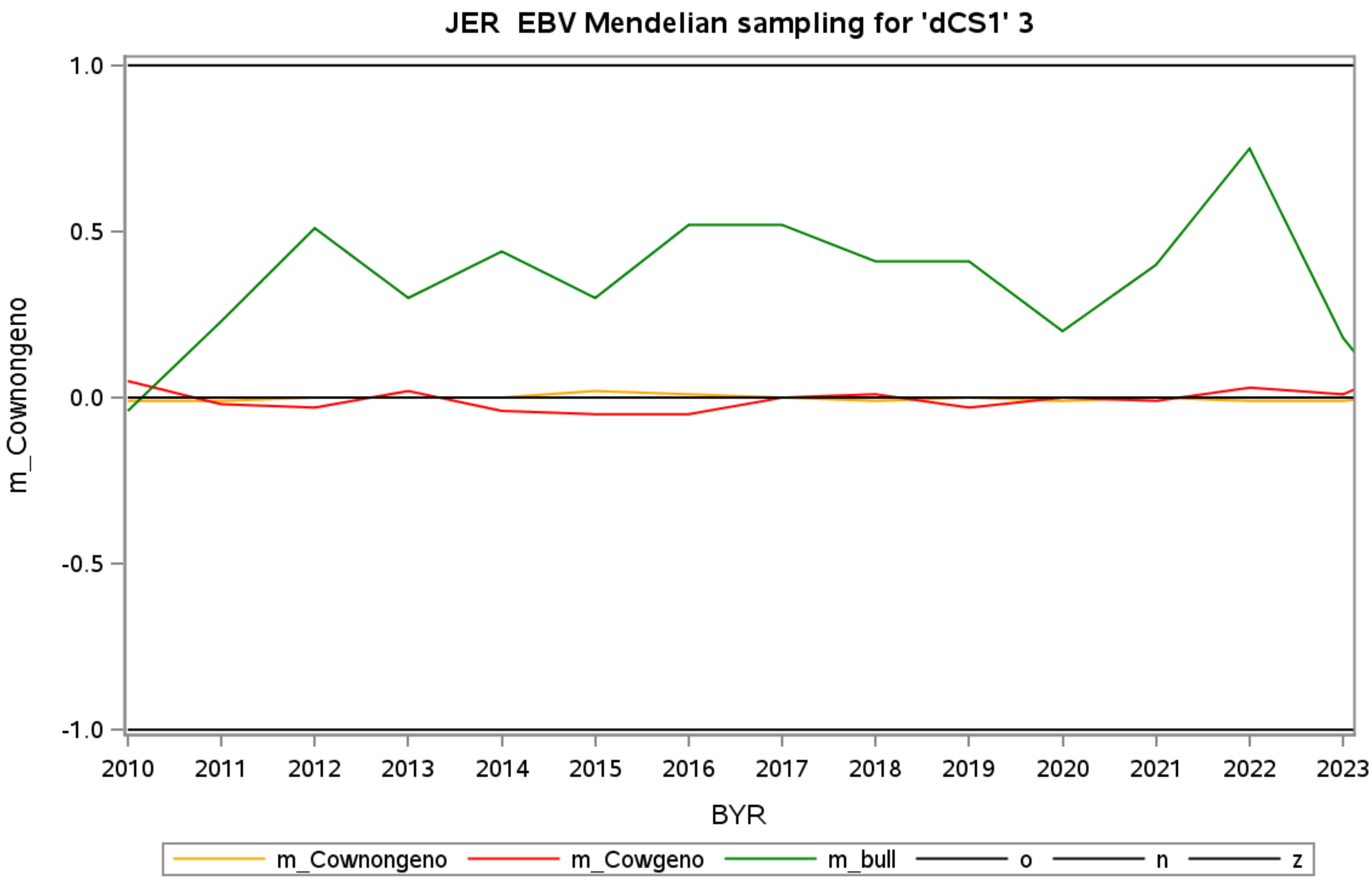
JER EBV Mendelian sampling for 'dCE1' 2

Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	-0.01	0.07	-0.10	29715	2167	220
2	2011	-0.01	0.08	0.17	29681	3993	353
3	2012	-0.01	0.08	-0.14	29702	4608	367
4	2013	-0.01	0.10	-0.11	29568	3660	370
5	2014	-0.01	0.06	0.03	29101	4600	399
6	2015	-0.02	0.07	0.15	27738	5420	475
7	2016	-0.03	0.09	-0.12	26744	6366	403
8	2017	-0.03	0.08	0.15	24092	7913	462
9	2018	-0.04	0.09	0.15	25980	9788	305
10	2019	-0.04	0.08	-0.01	25214	11878	361
11	2020	-0.04	0.07	-0.09	27465	14029	339
12	2021	-0.06	0.10	0.26	27617	13915	215
13	2022	-0.06	0.11	-0.05	27730	14123	14
14	2023	-0.05	0.10	-0.03	25356	12417	11
15	2024	-0.03	0.11	0.04	5657	1766	1

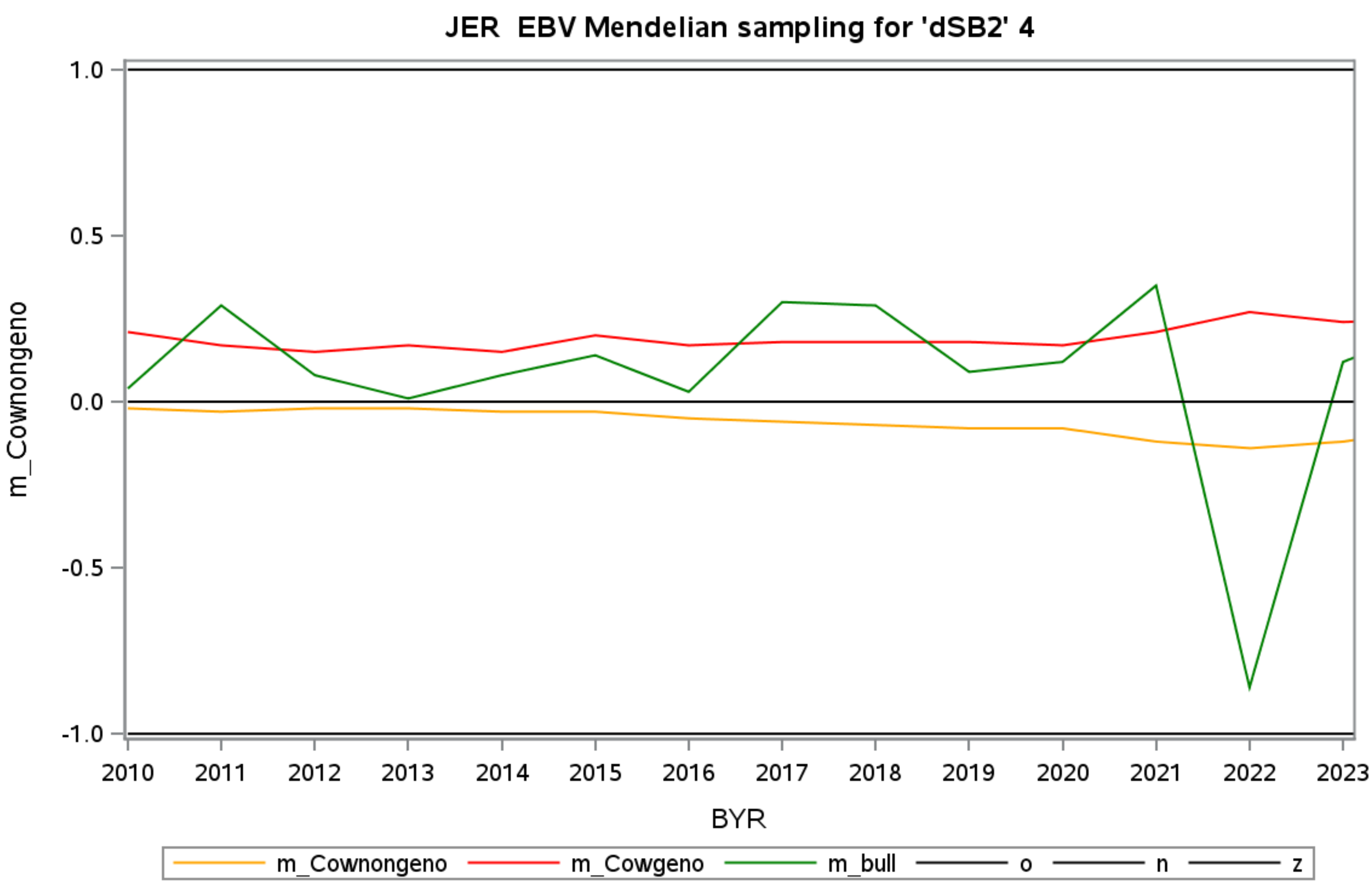


JER EBV Mendelian sampling for 'dCS1' 3

Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	-0.01	0.05	-0.04	29715	2167	220
2	2011	-0.01	-0.02	0.23	29681	3993	353
3	2012	0.00	-0.03	0.51	29702	4608	367
4	2013	0.00	0.02	0.30	29568	3660	370
5	2014	0.00	-0.04	0.44	29101	4600	399
6	2015	0.02	-0.05	0.30	27738	5420	475
7	2016	0.01	-0.05	0.52	26744	6366	403
8	2017	0.00	0.00	0.52	24092	7913	462
9	2018	-0.01	0.01	0.41	25980	9788	305
10	2019	0.00	-0.03	0.41	25214	11878	361
11	2020	-0.01	0.00	0.20	27465	14029	339
12	2021	0.00	-0.01	0.40	27617	13915	215
13	2022	-0.01	0.03	0.75	27730	14123	14
14	2023	-0.01	0.01	0.18	25356	12417	11
15	2024	0.02	0.13	-0.17	5657	1766	1

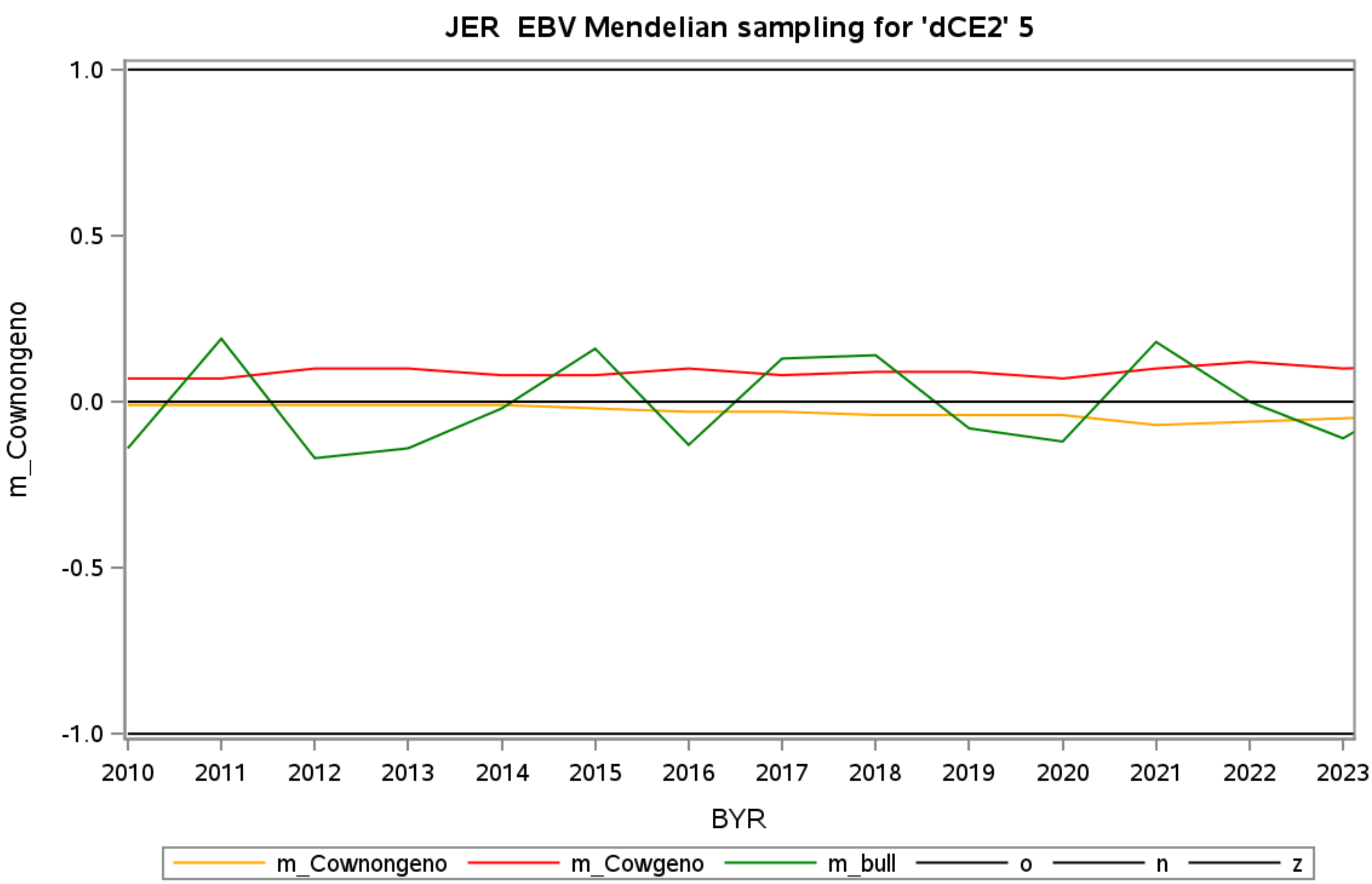


Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	-0.02	0.21	0.04	29715	2167	220
2	2011	-0.03	0.17	0.29	29681	3993	353
3	2012	-0.02	0.15	0.08	29702	4608	367
4	2013	-0.02	0.17	0.01	29568	3660	370
5	2014	-0.03	0.15	0.08	29101	4600	399
6	2015	-0.03	0.20	0.14	27738	5420	475
7	2016	-0.05	0.17	0.03	26744	6366	403
8	2017	-0.06	0.18	0.30	24092	7913	462
9	2018	-0.07	0.18	0.29	25980	9788	305
10	2019	-0.08	0.18	0.09	25214	11878	361
11	2020	-0.08	0.17	0.12	27465	14029	339
12	2021	-0.12	0.21	0.35	27617	13915	215
13	2022	-0.14	0.27	-0.86	27730	14123	14
14	2023	-0.12	0.24	0.12	25356	12417	11
15	2024	-0.08	0.25	0.23	5657	1766	1



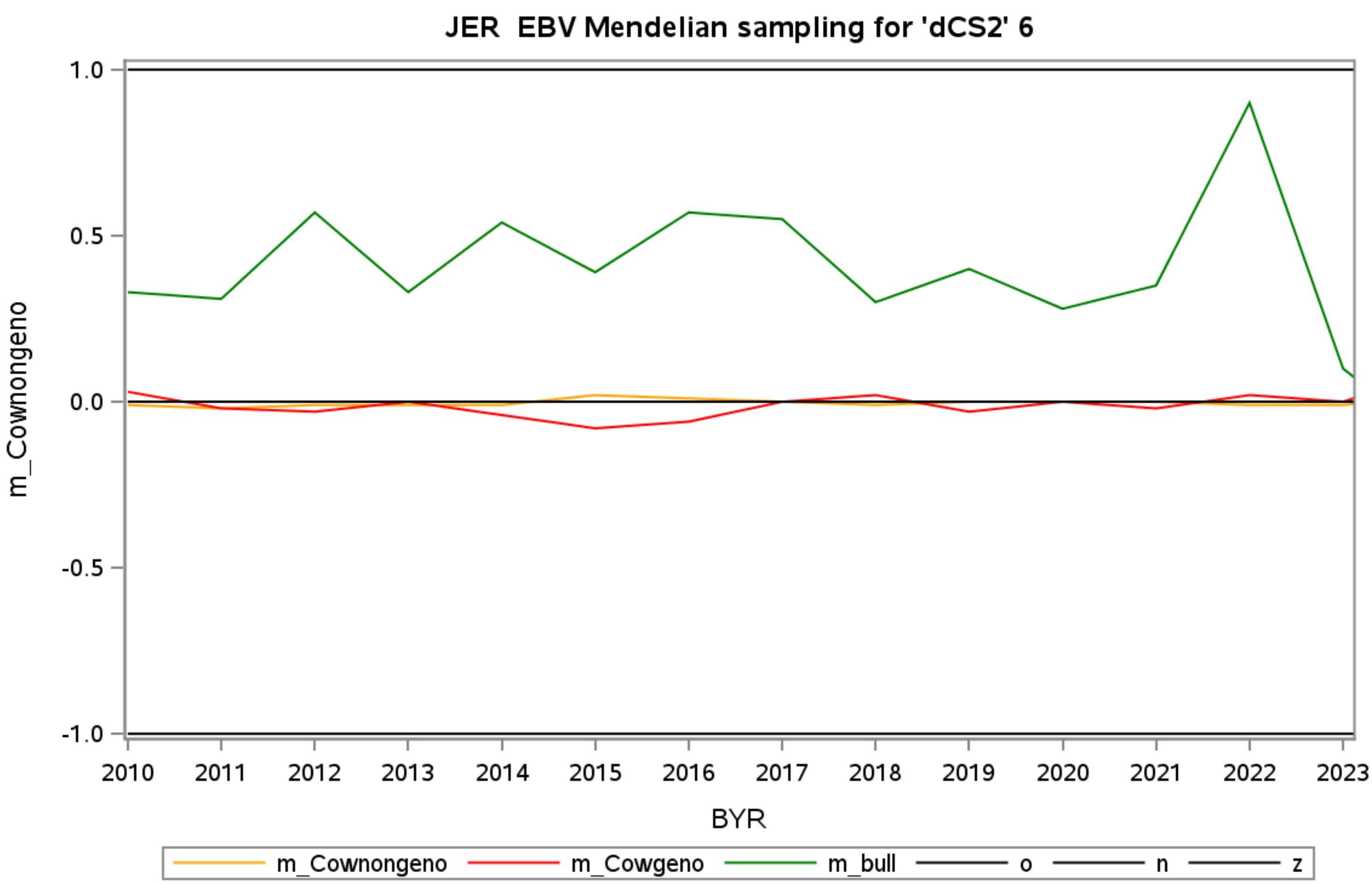
JER EBV Mendelian sampling for 'dCE2' 5

Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	-0.01	0.07	-0.14	29715	2167	220
2	2011	-0.01	0.07	0.19	29681	3993	353
3	2012	-0.01	0.10	-0.17	29702	4608	367
4	2013	-0.01	0.10	-0.14	29568	3660	370
5	2014	-0.01	0.08	-0.02	29101	4600	399
6	2015	-0.02	0.08	0.16	27738	5420	475
7	2016	-0.03	0.10	-0.13	26744	6366	403
8	2017	-0.03	0.08	0.13	24092	7913	462
9	2018	-0.04	0.09	0.14	25980	9788	305
10	2019	-0.04	0.09	-0.08	25214	11878	361
11	2020	-0.04	0.07	-0.12	27465	14029	339
12	2021	-0.07	0.10	0.18	27617	13915	215
13	2022	-0.06	0.12	0.00	27730	14123	14
14	2023	-0.05	0.10	-0.11	25356	12417	11
15	2024	-0.04	0.11	0.05	5657	1766	1

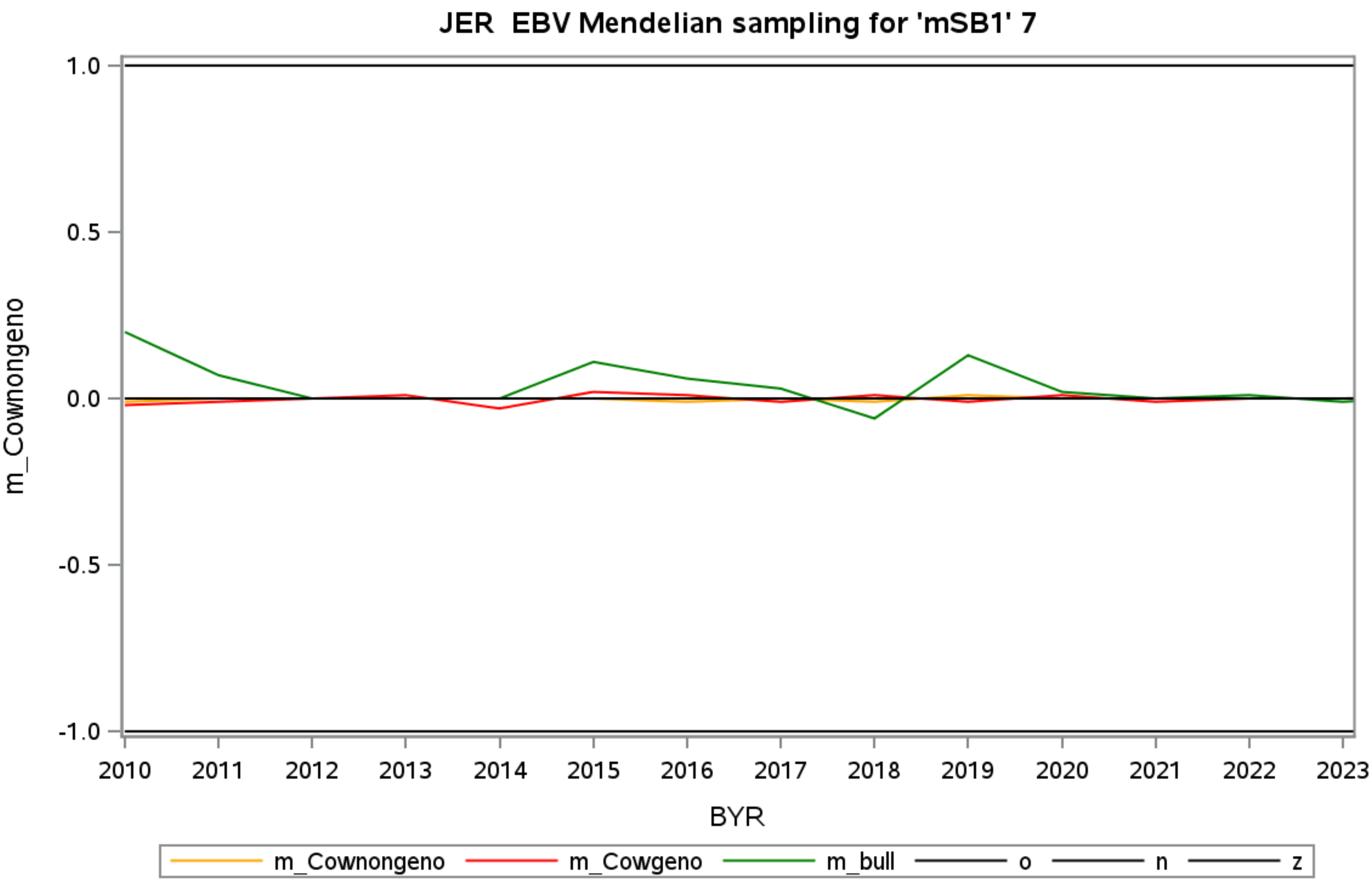


JER EBV Mendelian sampling for 'dCS2' 6

Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	-0.01	0.03	0.33	29715	2167	220
2	2011	-0.02	-0.02	0.31	29681	3993	353
3	2012	-0.01	-0.03	0.57	29702	4608	367
4	2013	-0.01	0.00	0.33	29568	3660	370
5	2014	-0.01	-0.04	0.54	29101	4600	399
6	2015	0.02	-0.08	0.39	27738	5420	475
7	2016	0.01	-0.06	0.57	26744	6366	403
8	2017	0.00	0.00	0.55	24092	7913	462
9	2018	-0.01	0.02	0.30	25980	9788	305
10	2019	0.00	-0.03	0.40	25214	11878	361
11	2020	0.00	0.00	0.28	27465	14029	339
12	2021	0.00	-0.02	0.35	27617	13915	215
13	2022	-0.01	0.02	0.90	27730	14123	14
14	2023	-0.01	0.00	0.10	25356	12417	11
15	2024	0.02	0.09	-0.12	5657	1766	1

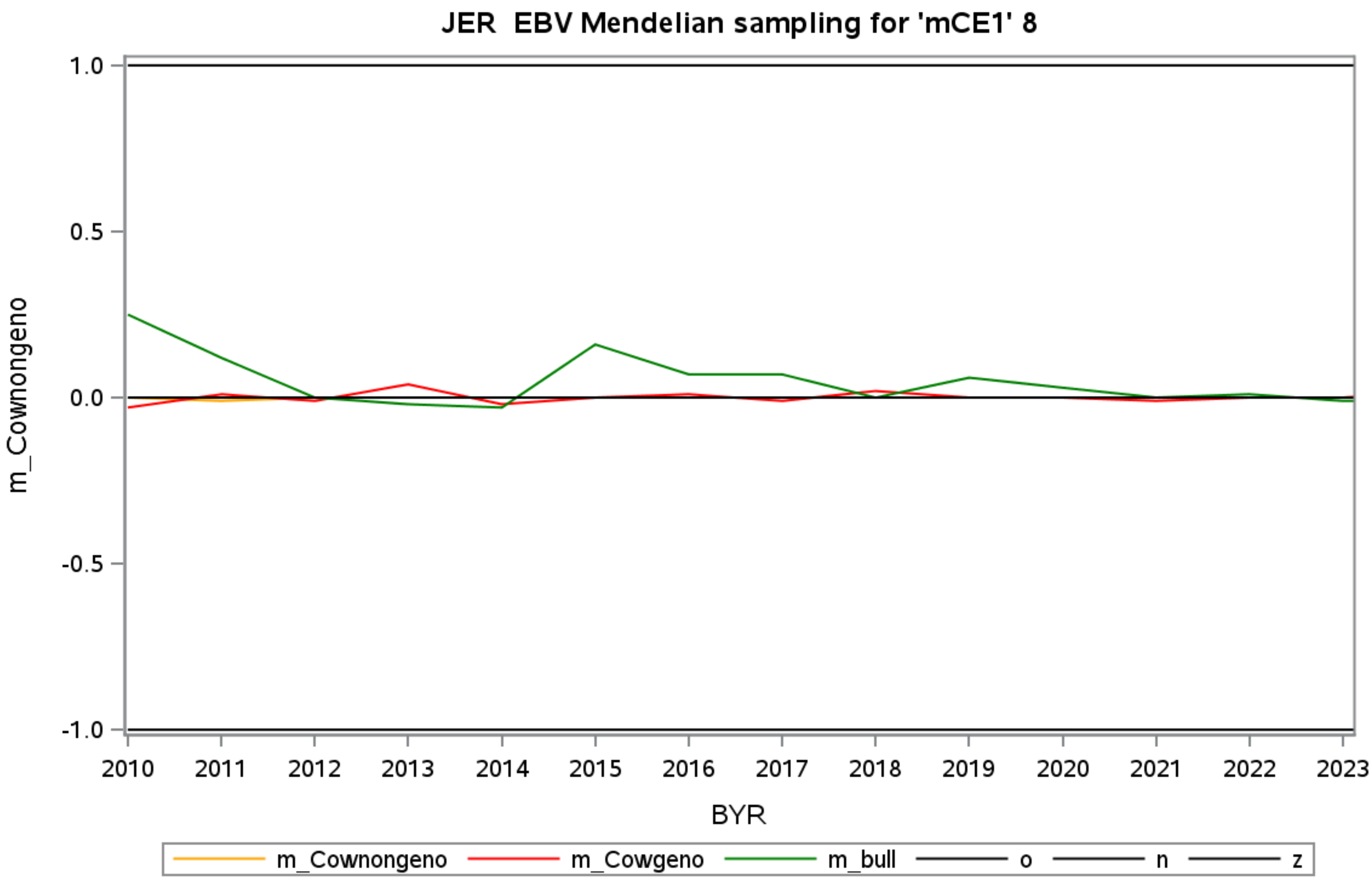


Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	-0.01	-0.02	0.20	29715	2167	220
2	2011	0.00	-0.01	0.07	29681	3993	353
3	2012	0.00	0.00	0.00	29702	4608	367
4	2013	0.00	0.01	0.00	29568	3660	370
5	2014	0.00	-0.03	0.00	29101	4600	399
6	2015	0.00	0.02	0.11	27738	5420	475
7	2016	-0.01	0.01	0.06	26744	6366	403
8	2017	0.00	-0.01	0.03	24092	7913	462
9	2018	-0.01	0.01	-0.06	25980	9788	305
10	2019	0.01	-0.01	0.13	25214	11878	361
11	2020	0.00	0.01	0.02	27465	14029	339
12	2021	0.00	-0.01	0.00	27617	13915	215
13	2022	0.00	0.00	0.01	27730	14123	14
14	2023	0.00	0.00	-0.01	25356	12417	11
15	2024	0.00	0.01	0.01	5657	1766	1



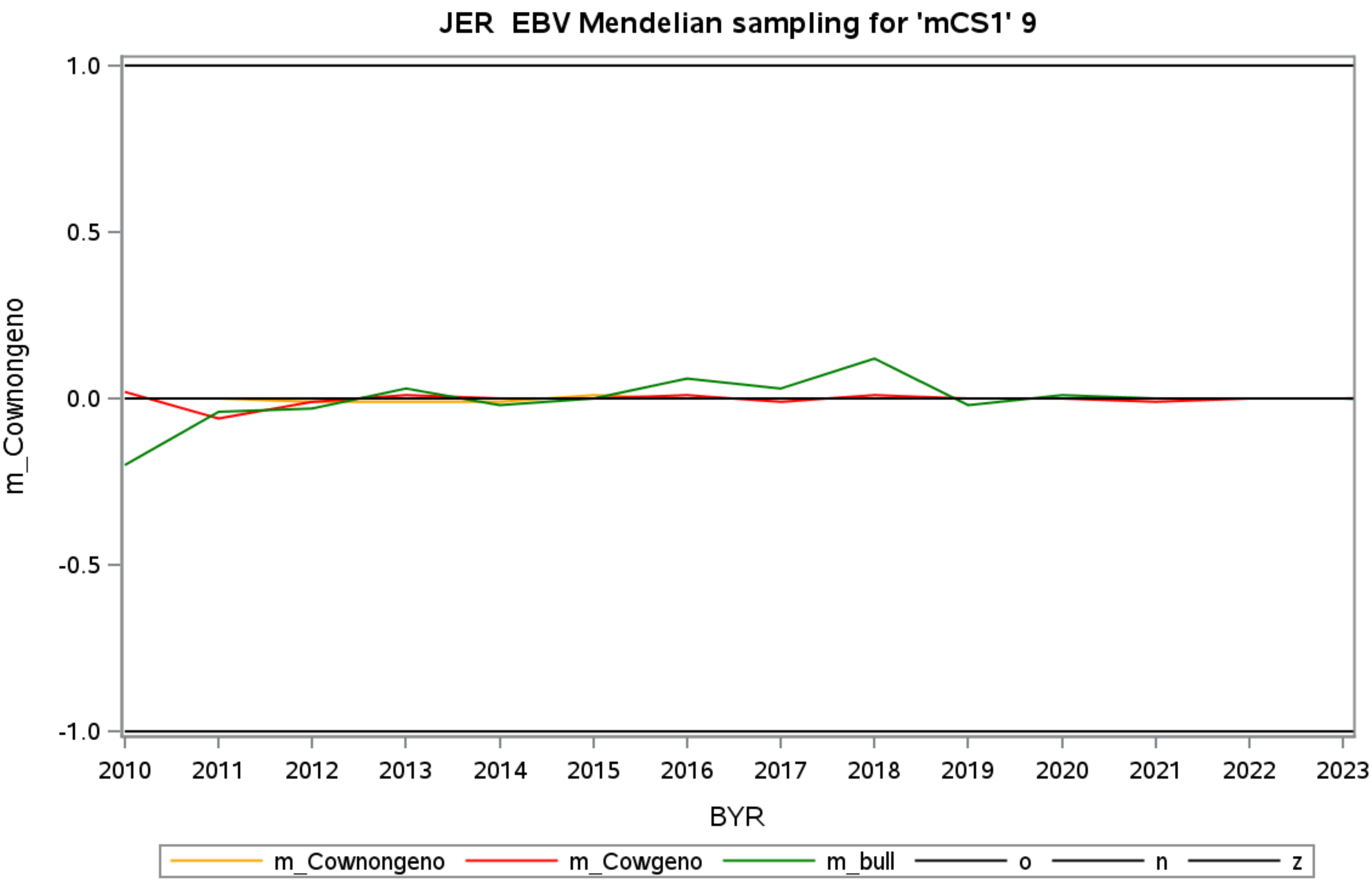
JER EBV Mendelian sampling for 'mCE1' 8

Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	0.00	-0.03	0.25	29715	2167	220
2	2011	-0.01	0.01	0.12	29681	3993	353
3	2012	0.00	-0.01	0.00	29702	4608	367
4	2013	0.00	0.04	-0.02	29568	3660	370
5	2014	0.00	-0.02	-0.03	29101	4600	399
6	2015	0.00	0.00	0.16	27738	5420	475
7	2016	0.00	0.01	0.07	26744	6366	403
8	2017	0.00	-0.01	0.07	24092	7913	462
9	2018	0.00	0.02	0.00	25980	9788	305
10	2019	0.00	0.00	0.06	25214	11878	361
11	2020	0.00	0.00	0.03	27465	14029	339
12	2021	0.00	-0.01	0.00	27617	13915	215
13	2022	0.00	0.00	0.01	27730	14123	14
14	2023	0.00	0.00	-0.01	25356	12417	11
15	2024	0.01	0.02	-0.01	5657	1766	1

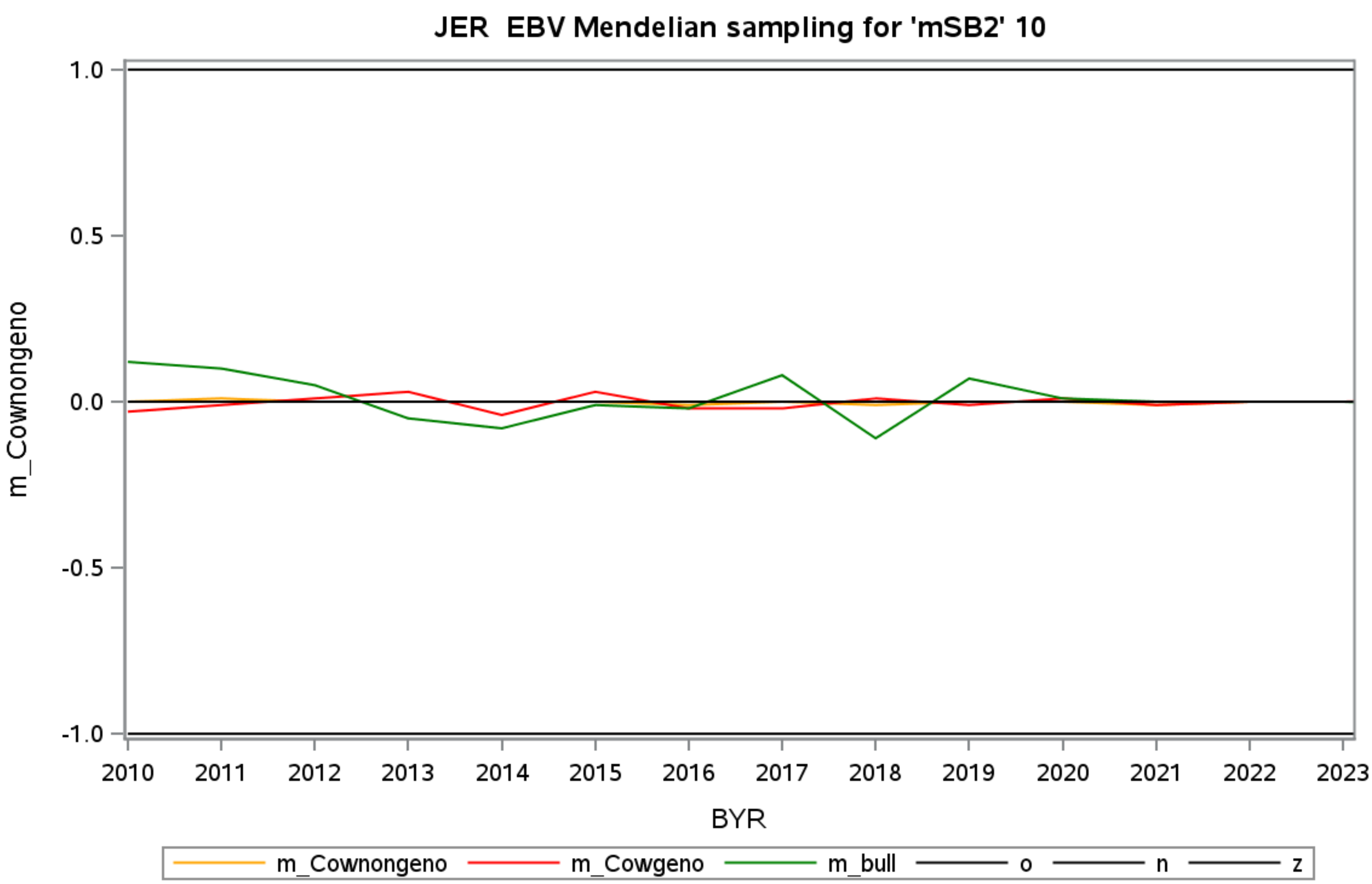


JER EBV Mendelian sampling for 'mCS1' 9

Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	0.00	0.02	-0.20	29715	2167	220
2	2011	0.00	-0.06	-0.04	29681	3993	353
3	2012	-0.01	-0.01	-0.03	29702	4608	367
4	2013	-0.01	0.01	0.03	29568	3660	370
5	2014	-0.01	0.00	-0.02	29101	4600	399
6	2015	0.01	0.00	0.00	27738	5420	475
7	2016	0.00	0.01	0.06	26744	6366	403
8	2017	0.00	-0.01	0.03	24092	7913	462
9	2018	0.00	0.01	0.12	25980	9788	305
10	2019	0.00	0.00	-0.02	25214	11878	361
11	2020	0.00	0.00	0.01	27465	14029	339
12	2021	0.00	-0.01	0.00	27617	13915	215
13	2022	0.00	0.00	0.00	27730	14123	14
14	2023	0.00	0.00	0.00	25356	12417	11
15	2024	0.00	0.01	-0.01	5657	1766	1

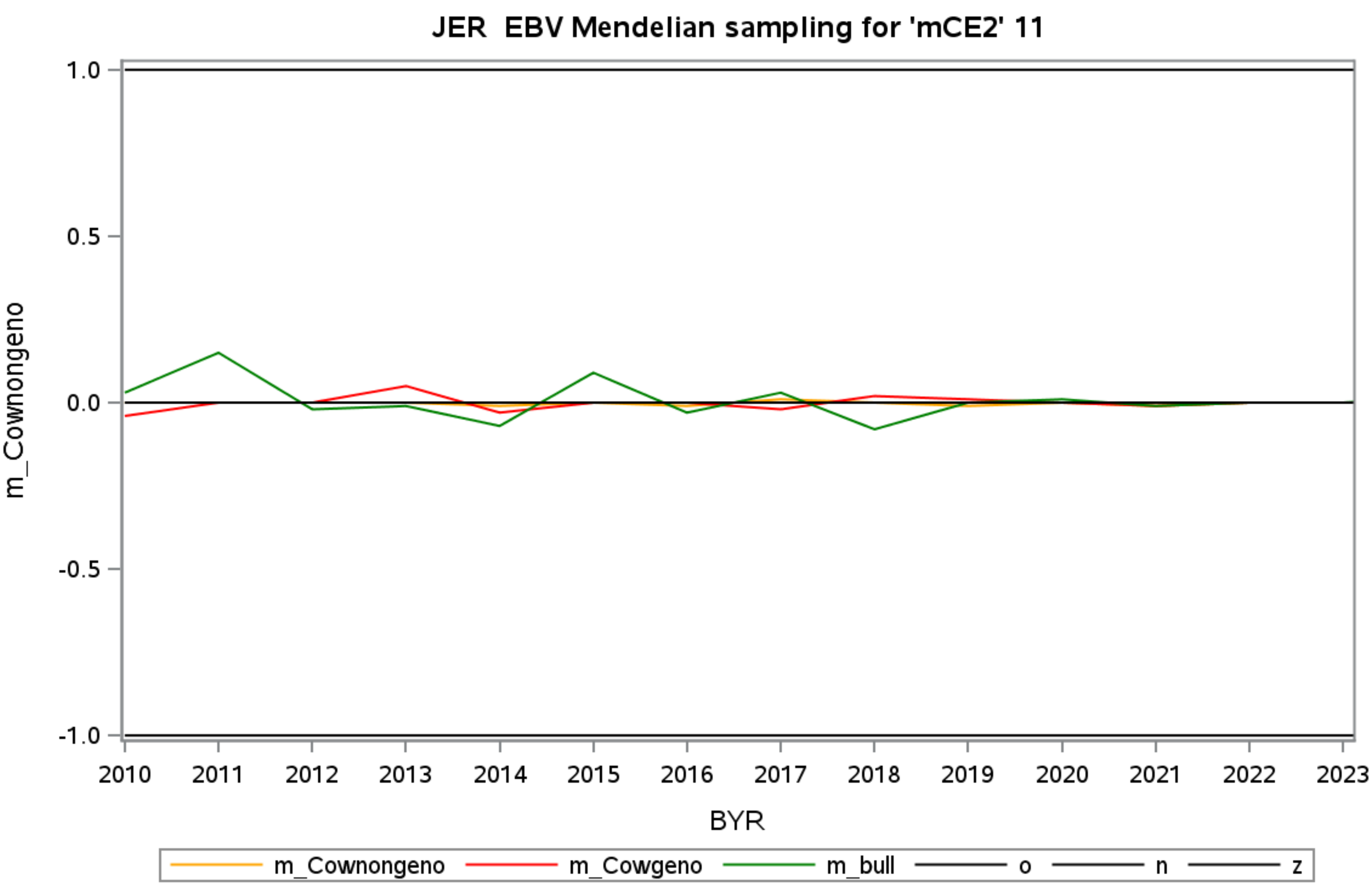


Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	0.00	-0.03	0.12	29715	2167	220
2	2011	0.01	-0.01	0.10	29681	3993	353
3	2012	0.00	0.01	0.05	29702	4608	367
4	2013	0.00	0.03	-0.05	29568	3660	370
5	2014	0.00	-0.04	-0.08	29101	4600	399
6	2015	0.00	0.03	-0.01	27738	5420	475
7	2016	-0.01	-0.02	-0.02	26744	6366	403
8	2017	0.00	-0.02	0.08	24092	7913	462
9	2018	-0.01	0.01	-0.11	25980	9788	305
10	2019	0.00	-0.01	0.07	25214	11878	361
11	2020	0.00	0.01	0.01	27465	14029	339
12	2021	-0.01	-0.01	0.00	27617	13915	215
13	2022	0.00	0.00	0.00	27730	14123	14
14	2023	0.00	0.00	0.00	25356	12417	11
15	2024	0.00	0.01	-0.01	5657	1766	1



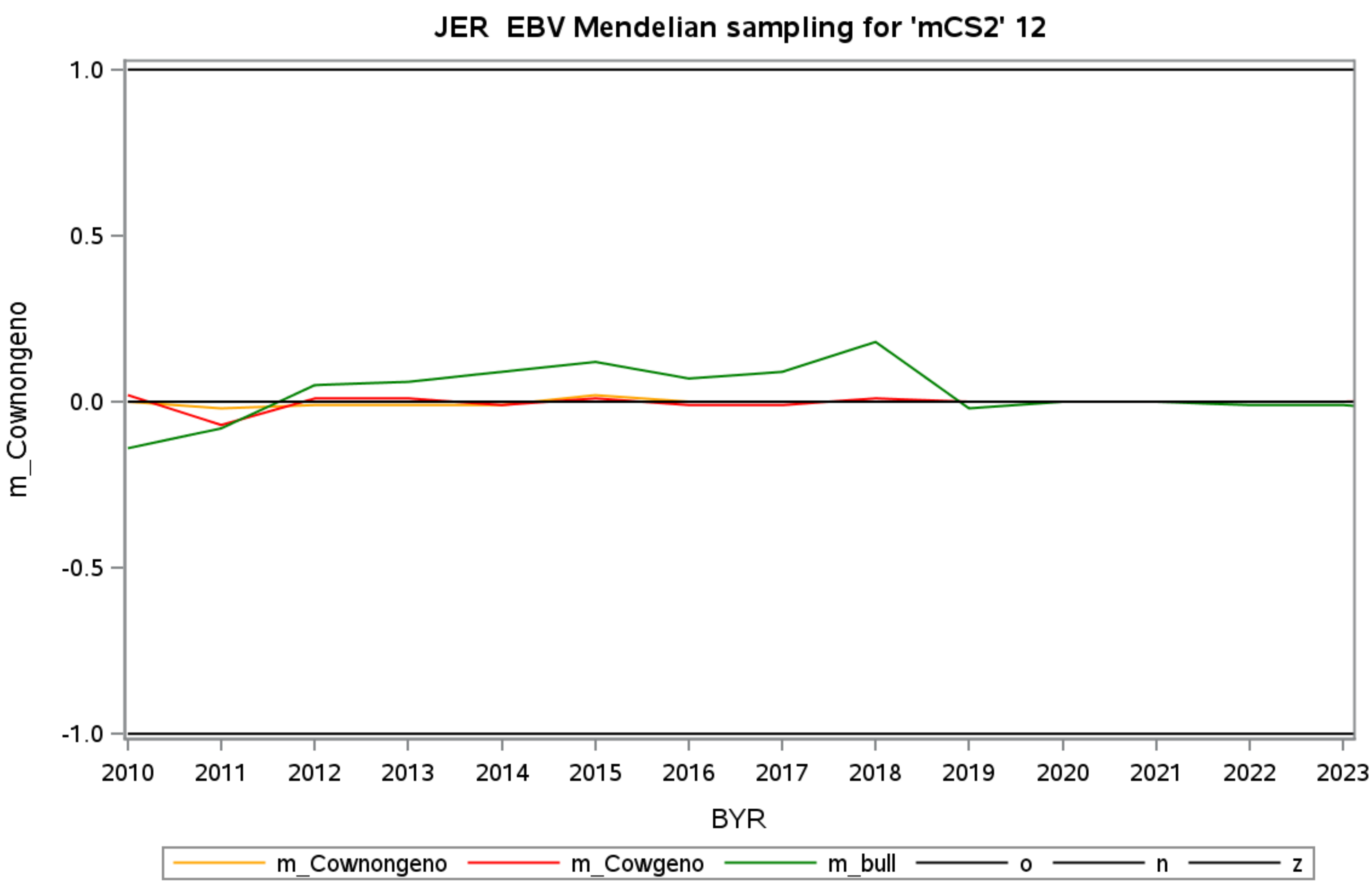
JER EBV Mendelian sampling for 'mCE2' 11

Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	0.00	-0.04	0.03	29715	2167	220
2	2011	0.00	0.00	0.15	29681	3993	353
3	2012	0.00	0.00	-0.02	29702	4608	367
4	2013	0.00	0.05	-0.01	29568	3660	370
5	2014	-0.01	-0.03	-0.07	29101	4600	399
6	2015	0.00	0.00	0.09	27738	5420	475
7	2016	-0.01	0.00	-0.03	26744	6366	403
8	2017	0.01	-0.02	0.03	24092	7913	462
9	2018	0.00	0.02	-0.08	25980	9788	305
10	2019	-0.01	0.01	0.00	25214	11878	361
11	2020	0.00	0.00	0.01	27465	14029	339
12	2021	-0.01	-0.01	-0.01	27617	13915	215
13	2022	0.00	0.00	0.00	27730	14123	14
14	2023	0.00	0.00	0.00	25356	12417	11
15	2024	0.00	0.00	0.02	5657	1766	1

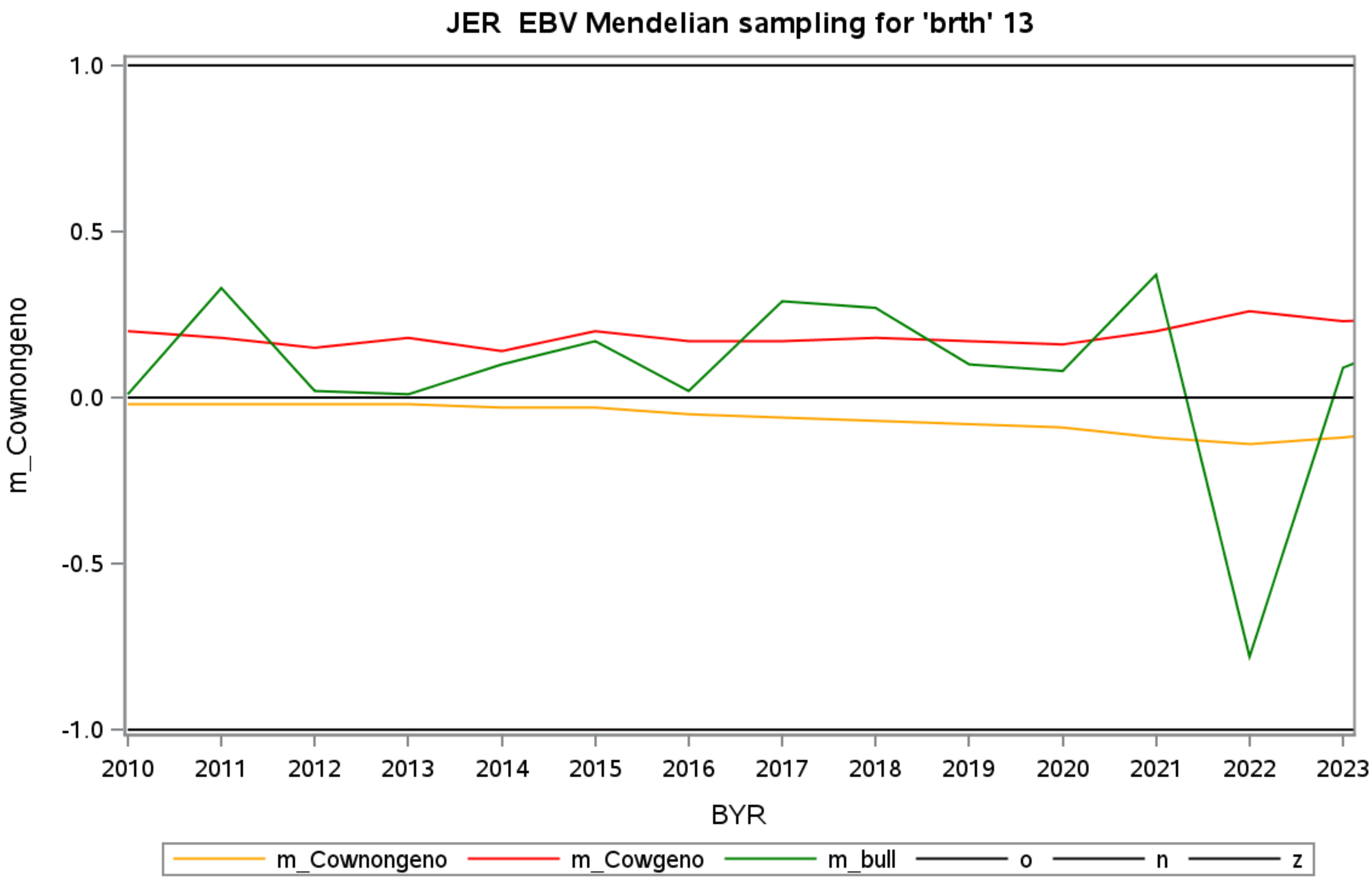


JER EBV Mendelian sampling for 'mCS2' 12

Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	0.00	0.02	-0.14	29715	2167	220
2	2011	-0.02	-0.07	-0.08	29681	3993	353
3	2012	-0.01	0.01	0.05	29702	4608	367
4	2013	-0.01	0.01	0.06	29568	3660	370
5	2014	-0.01	-0.01	0.09	29101	4600	399
6	2015	0.02	0.01	0.12	27738	5420	475
7	2016	0.00	-0.01	0.07	26744	6366	403
8	2017	0.00	-0.01	0.09	24092	7913	462
9	2018	0.00	0.01	0.18	25980	9788	305
10	2019	0.00	0.00	-0.02	25214	11878	361
11	2020	0.00	0.00	0.00	27465	14029	339
12	2021	0.00	0.00	0.00	27617	13915	215
13	2022	0.00	0.00	-0.01	27730	14123	14
14	2023	0.00	0.00	-0.01	25356	12417	11
15	2024	0.00	0.01	-0.03	5657	1766	1



Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	-0.02	0.20	0.01	29715	2167	220
2	2011	-0.02	0.18	0.33	29681	3993	353
3	2012	-0.02	0.15	0.02	29702	4608	367
4	2013	-0.02	0.18	0.01	29568	3660	370
5	2014	-0.03	0.14	0.10	29101	4600	399
6	2015	-0.03	0.20	0.17	27738	5420	475
7	2016	-0.05	0.17	0.02	26744	6366	403
8	2017	-0.06	0.17	0.29	24092	7913	462
9	2018	-0.07	0.18	0.27	25980	9788	305
10	2019	-0.08	0.17	0.10	25214	11878	361
11	2020	-0.09	0.16	0.08	27465	14029	339
12	2021	-0.12	0.20	0.37	27617	13915	215
13	2022	-0.14	0.26	-0.78	27730	14123	14
14	2023	-0.12	0.23	0.09	25356	12417	11
15	2024	-0.09	0.24	0.20	5657	1766	1



Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	0.00	-0.03	0.20	29715	2167	220
2	2011	0.00	0.00	0.12	29681	3993	353
3	2012	0.00	0.01	0.02	29702	4608	367
4	2013	0.00	0.03	-0.02	29568	3660	370
5	2014	0.00	-0.03	-0.04	29101	4600	399
6	2015	-0.01	0.01	0.09	27738	5420	475
7	2016	-0.01	0.00	0.03	26744	6366	403
8	2017	0.00	-0.02	0.06	24092	7913	462
9	2018	-0.01	0.02	-0.08	25980	9788	305
10	2019	0.00	0.00	0.10	25214	11878	361
11	2020	0.00	0.01	0.02	27465	14029	339
12	2021	0.00	-0.01	0.00	27617	13915	215
13	2022	0.00	0.00	0.00	27730	14123	14
14	2023	-0.01	-0.01	-0.01	25356	12417	11
15	2024	-0.01	0.00	0.00	5657	1766	1