SEGES INNOVATION

STØTTET AF
Mælkeafgiftsfonden

Final report for Singlestep fertility for HOL, RDC and JER

Singlestep fertility is developed for data for May2024 official evaluation.

Different tests have been done:

- Comparison of breeding values for singlestep and current traditional setup
- 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 traditional full and traditional reduced model
- Legarra Reverter regression for singlestep breeding values
- Legarra Reverter regression for traditional breeding values
- Mendelian sampling for singlestep breeding values
- Mendelian sampling for traditional breeding values
- 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 are 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 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	cr0	207368	89.0	89.2	7.2	7.3	-0.2	1.5	0.98
2	2011	cr0	209169	88.8	89.3	7.1	7.1	-0.5	1.7	0.97
3	2012	cr0	211277	89.2	89.9	7.1	7.2	-0.7	1.9	0.97
4	2013	cr0	207036	90.3	91.1	7.0	7.0	-0.8	2.0	0.96
5	2014	cr0	207925	91.4	92.3	7.3	7.3	-0.9	2.1	0.96
6	2015	cr0	198640	92.2	92.9	7.3	7.3	-0.7	2.1	0.96
7	2016	cr0	192226	94.2	94.9	8.0	8.0	-0.6	2.2	0.96
8	2017	cr0	171167	96.1	96.5	8.1	8.2	-0.4	2.2	0.96
9	2018	cr0	164619	95.8	96.2	7.6	7.6	-0.5	2.2	0.96
10	2019	cr0	158325	98.2	98.5	8.0	8.1	-0.4	2.2	0.96
11	2020	cr0	161608	100.1	100.0	7.3	7.3	0.1	2.1	0.96
12	2021	cr0	176721	102.7	102.2	7.7	7.7	0.5	2.1	0.96
13	2022	cr0	86325	104.0	103.0	7.4	7.4	1.0	2.3	0.95
14	2010	cr1	188329	88.0	89.1	6.8	7.0	-1.1	1.3	0.98
15	2011	cr1	185587	88.3	89.7	6.8	7.0	-1.3	1.5	0.98
16	2012	cr1	186206	88.9	90.3	6.9	7.1	-1.4	1.6	0.98
17	2013	cr1	182658	89.9	91.4	6.7	6.9	-1.5	1.6	0.97
18	2014	cr1	181421	91.5	92.9	6.6	6.8	-1.5	1.7	0.97
19	2015	cr1	176345	92.1	93.4	6.5	6.5	-1.2	1.8	0.96
20	2016	cr1	170454	94.1	95.0	6.9	6.9	-0.9	1.9	0.96
21	2017	cr1	154331	95.9	96.6	7.0	7.0	-0.7	1.9	0.96
22	2018	cr1	148153	96.8	97.4	6.7	6.7	-0.6	1.8	0.96
23	2019	cr1	140976	97.9	98.2	6.8	6.9	-0.3	1.8	0.96
24	2020	cr1	140104	100.2	100.1	6.8	6.8	0.1	1.9	0.96
25	2021	cr1	64541	101.5	101.1	6.7	6.7	0.4	2.1	0.95
26	2022	cr1	9	.	.	.	.	.	.	0.97
27	2010	cr2	138937	88.8	90.1	6.8	7.0	-1.3	1.4	0.98
28	2011	cr2	137644	89.1	90.6	6.9	7.0	-1.5	1.5	0.98
29	2012	cr2	138347	89.7	91.3	7.1	7.3	-1.6	1.6	0.98
30	2013	cr2	136654	90.6	92.2	6.9	7.0	-1.6	1.7	0.97
31	2014	cr2	138645	92.4	94.0	7.2	7.4	-1.6	1.8	0.97
32	2015	cr2	134986	92.7	94.0	6.7	6.8	-1.3	1.9	0.96
33	2016	cr2	132438	94.5	95.5	7.2	7.2	-1.0	2.0	0.96
34	2017	cr2	121427	96.4	97.2	7.2	7.2	-0.8	2.0	0.96
35	2018	cr2	116327	97.3	97.9	7.1	7.1	-0.6	1.9	0.96
36	2019	cr2	108074	98.3	98.6	7.0	7.0	-0.3	1.9	0.96
37	2020	cr2	46989	100.6	100.5	7.1	7.1	0.0	1.9	0.96

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	2021	cr2	39	102.0	102.2	5.9	5.6	-0.2	1.7	0.96
39	2010	cr3	84467	89.4	90.9	6.8	7.1	-1.4	1.5	0.98
40	2011	cr3	85198	89.8	91.4	6.8	7.0	-1.6	1.7	0.97
41	2012	cr3	86998	90.5	92.2	7.0	7.2	-1.7	1.7	0.97
42	2013	cr3	88407	91.3	93.0	6.8	7.0	-1.7	1.8	0.97
43	2014	cr3	90054	93.1	94.8	7.2	7.4	-1.7	2.0	0.96
44	2015	cr3	88927	93.5	94.8	6.7	6.7	-1.4	2.0	0.95
45	2016	cr3	88956	95.2	96.2	7.0	7.1	-1.0	2.1	0.96
46	2017	cr3	82118	97.1	98.0	7.1	7.1	-0.8	2.1	0.96
47	2018	cr3	76367	98.2	98.8	7.0	7.0	-0.6	2.0	0.96
48	2019	cr3	29297	99.7	100.1	6.8	6.7	-0.4	2.0	0.96
49	2020	cr3	43	101.4	101.3	6.7	6.1	0.1	2.5	0.93
50	2010	cr	230877	87.9	89.2	6.7	7.0	-1.3	1.3	0.98
51	2011	cr	231373	88.4	89.9	6.7	7.0	-1.5	1.4	0.98
52	2012	cr	233090	89.0	90.6	6.9	7.2	-1.6	1.5	0.98
53	2013	cr	227928	89.9	91.5	6.7	6.9	-1.7	1.6	0.97
54	2014	cr	228540	91.6	93.2	6.9	7.0	-1.6	1.7	0.97
55	2015	cr	219270	92.1	93.5	6.5	6.6	-1.4	1.8	0.96
56	2016	cr	211704	93.9	95.0	7.0	7.1	-1.1	1.8	0.97
57	2017	cr	189467	95.9	96.7	7.0	7.1	-0.9	1.8	0.97
58	2018	cr	181053	96.9	97.5	6.9	6.9	-0.6	1.8	0.97
59	2019	cr	172531	97.8	98.1	6.9	6.9	-0.3	1.8	0.97
60	2020	cr	174539	100.1	100.1	6.9	6.9	0.1	1.9	0.96
61	2021	cr	181948	101.5	100.9	6.3	6.3	0.5	2.2	0.94
62	2022	cr	86331	102.9	101.4	6.4	6.1	1.5	2.9	0.90
63	2010	nrr0	196931	96.6	95.9	6.5	6.6	0.8	1.5	0.97
64	2011	nrr0	198887	95.8	95.4	6.6	6.6	0.4	1.7	0.97
65	2012	nrr0	200831	95.7	95.5	6.9	7.0	0.2	1.9	0.96
66	2013	nrr0	197222	96.0	96.0	6.7	6.7	0.0	2.0	0.96
67	2014	nrr0	198172	96.3	96.4	6.8	6.8	-0.1	2.1	0.95
68	2015	nrr0	189306	96.5	96.6	7.2	7.1	-0.1	2.1	0.95
69	2016	nrr0	183836	97.4	97.5	7.6	7.5	-0.1	2.2	0.96
70	2017	nrr0	163237	98.5	98.6	7.7	7.7	-0.1	2.2	0.96
71	2018	nrr0	156972	97.2	97.4	7.5	7.4	-0.2	2.2	0.96
72	2019	nrr0	151201	98.9	99.2	7.5	7.6	-0.3	2.2	0.96
73	2020	nrr0	153994	100.0	99.9	7.0	7.0	0.0	2.2	0.95
74	2021	nrr0	170316	101.6	101.3	7.2	7.2	0.4	2.1	0.96

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	2022	nrr0	123969	101.7	101.1	7.2	7.2	0.7	2.2	0.95
76	2023	nrr0	233	101.5	100.2	7.4	7.4	1.3	2.8	0.93
77	2010	nrr1	179762	94.3	95.2	6.5	6.6	-0.9	1.3	0.98
78	2011	nrr1	177261	93.8	94.9	6.6	6.6	-1.1	1.5	0.97
79	2012	nrr1	178209	93.8	95.0	6.6	6.7	-1.2	1.6	0.97
80	2013	nrr1	174959	94.2	95.3	6.5	6.5	-1.1	1.6	0.97
81	2014	nrr1	173817	94.9	95.9	6.4	6.3	-1.1	1.8	0.96
82	2015	nrr1	169329	95.3	96.3	6.5	6.5	-0.9	1.8	0.96
83	2016	nrr1	163457	96.5	97.1	6.5	6.5	-0.7	1.9	0.96
84	2017	nrr1	148147	97.7	98.2	6.3	6.3	-0.4	1.9	0.96
85	2018	nrr1	142428	97.7	98.1	6.1	6.0	-0.4	1.8	0.95
86	2019	nrr1	135597	98.7	98.9	6.4	6.4	-0.2	1.8	0.96
87	2020	nrr1	136156	100.1	100.1	6.4	6.4	0.1	1.8	0.96
88	2021	nrr1	90678	100.9	100.6	6.1	6.1	0.3	2.0	0.94
89	2022	nrr1	500	101.9	101.3	6.4	6.4	0.6	2.4	0.93
90	2010	nrr2	132676	94.3	94.8	6.8	6.8	-0.5	1.5	0.98
91	2011	nrr2	131597	93.8	94.4	6.9	7.0	-0.6	1.6	0.97
92	2012	nrr2	132691	93.7	94.4	7.2	7.4	-0.7	1.7	0.97
93	2013	nrr2	131018	94.0	94.8	7.1	7.2	-0.8	1.8	0.97
94	2014	nrr2	133061	95.0	95.8	7.1	7.1	-0.8	1.9	0.96
95	2015	nrr2	129414	94.8	95.3	6.8	6.8	-0.6	2.0	0.96
96	2016	nrr2	127106	95.9	96.3	6.9	6.9	-0.5	2.0	0.96
97	2017	nrr2	116756	97.7	98.1	6.5	6.6	-0.4	2.0	0.95
98	2018	nrr2	111995	97.5	97.7	6.6	6.7	-0.3	1.9	0.96
99	2019	nrr2	106135	98.7	98.8	6.8	6.8	-0.1	1.9	0.96
100	2020	nrr2	68038	100.5	100.5	6.8	6.8	0.0	2.0	0.96
101	2021	nrr2	786	101.8	101.8	6.0	5.9	0.0	2.2	0.93
102	2010	nrr3	80335	95.0	95.8	7.0	7.2	-0.8	1.7	0.97
103	2011	nrr3	81273	94.4	95.3	7.2	7.4	-0.9	1.9	0.97
104	2012	nrr3	83154	94.5	95.4	7.3	7.6	-0.9	1.9	0.97
105	2013	nrr3	84448	94.8	95.7	7.4	7.5	-0.9	2.0	0.96
106	2014	nrr3	85947	95.8	96.6	7.4	7.5	-0.8	2.2	0.96
107	2015	nrr3	84949	95.5	96.0	7.2	7.3	-0.5	2.3	0.95
108	2016	nrr3	85169	96.7	97.1	7.5	7.7	-0.3	2.3	0.96
109	2017	nrr3	78801	98.1	98.3	7.0	7.1	-0.3	2.3	0.95
110	2018	nrr3	75582	98.1	98.2	7.3	7.5	-0.2	2.2	0.96
111	2019	nrr3	43239	99.5	99.7	7.3	7.4	-0.2	2.2	0.96

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	2020	nrr3	762	100.8	100.9	7.4	7.5	-0.1	2.3	0.95
113	2010	nrr	227039	94.3	95.0	6.4	6.5	-0.7	1.3	0.98
114	2011	nrr	227638	93.8	94.6	6.5	6.7	-0.9	1.4	0.98
115	2012	nrr	229187	93.8	94.7	6.7	6.9	-0.9	1.5	0.98
116	2013	nrr	224301	94.0	95.0	6.7	6.8	-0.9	1.6	0.97
117	2014	nrr	224963	94.9	95.8	6.5	6.6	-0.9	1.7	0.97
118	2015	nrr	215905	94.9	95.6	6.5	6.5	-0.7	1.8	0.96
119	2016	nrr	208762	96.0	96.5	6.7	6.7	-0.5	1.8	0.96
120	2017	nrr	186774	97.6	97.9	6.2	6.3	-0.4	1.8	0.96
121	2018	nrr	178662	97.5	97.8	6.3	6.4	-0.3	1.8	0.96
122	2019	nrr	170249	98.6	98.8	6.5	6.6	-0.2	1.8	0.96
123	2020	nrr	172596	100.2	100.1	6.3	6.3	0.1	1.9	0.96
124	2021	nrr	180771	100.9	100.6	5.6	5.5	0.4	2.3	0.92
125	2022	nrr	124068	102.1	100.9	5.7	5.4	1.2	2.8	0.87
126	2023	nrr	233	101.3	99.8	5.6	4.9	1.5	3.0	0.84
127	2010	icf1	181744	93.0	93.5	6.2	6.4	-0.5	1.1	0.99
128	2011	icf1	179382	94.3	94.9	5.9	6.0	-0.6	1.2	0.98
129	2012	icf1	180335	94.5	95.1	6.1	6.2	-0.6	1.2	0.98
130	2013	icf1	176954	95.5	96.2	6.1	6.2	-0.7	1.3	0.98
131	2014	icf1	175908	96.8	97.5	5.9	5.9	-0.6	1.4	0.97
132	2015	icf1	171089	97.0	97.5	6.3	6.4	-0.5	1.5	0.97
133	2016	icf1	165164	97.9	98.3	6.4	6.4	-0.4	1.5	0.97
134	2017	icf1	149658	98.2	98.5	6.2	6.2	-0.3	1.5	0.97
135	2018	icf1	143917	100.0	100.3	6.6	6.7	-0.3	1.4	0.98
136	2019	icf1	137059	99.1	99.2	6.1	6.1	-0.2	1.4	0.97
137	2020	icf1	137695	99.9	99.9	6.1	6.1	0.0	1.4	0.97
138	2021	icf1	89629	100.1	100.0	5.7	5.6	0.2	1.5	0.97
139	2022	icf1	131	100.3	99.6	4.8	4.7	0.7	1.8	0.93
140	2010	icf2	134760	92.3	93.1	6.6	6.9	-0.7	1.2	0.99
141	2011	icf2	133637	93.5	94.3	6.4	6.6	-0.8	1.3	0.98
142	2012	icf2	134574	94.0	94.8	6.5	6.7	-0.8	1.4	0.98
143	2013	icf2	132846	95.0	95.8	6.3	6.4	-0.8	1.4	0.98
144	2014	icf2	134825	96.5	97.3	6.3	6.5	-0.8	1.5	0.97
145	2015	icf2	131184	96.7	97.4	6.6	6.8	-0.7	1.6	0.97
146	2016	icf2	128763	97.6	98.1	6.9	7.0	-0.5	1.6	0.97
147	2017	icf2	118222	97.9	98.4	6.8	6.8	-0.4	1.6	0.97
148	2018	icf2	113483	99.9	100.3	7.1	7.2	-0.4	1.5	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
149	2019	icf2	107597	99.1	99.4	6.7	6.8	-0.2	1.5	0.98
150	2020	icf2	66666	100.4	100.5	6.6	6.6	0.0	1.5	0.97
151	2021	icf2	281	101.1	100.9	6.5	6.4	0.2	1.5	0.97
152	2010	icf3	82183	92.7	93.7	6.7	7.0	-1.0	1.4	0.98
153	2011	icf3	82997	94.0	95.0	6.7	7.0	-1.1	1.5	0.98
154	2012	icf3	84760	94.4	95.4	6.8	7.1	-1.0	1.5	0.98
155	2013	icf3	86046	95.4	96.4	6.5	6.7	-1.1	1.6	0.97
156	2014	icf3	87594	97.1	98.2	6.8	7.0	-1.1	1.7	0.97
157	2015	icf3	86526	97.2	98.1	6.9	7.1	-0.9	1.8	0.97
158	2016	icf3	86767	98.1	98.8	7.3	7.5	-0.8	1.8	0.97
159	2017	icf3	80278	98.6	99.2	7.1	7.3	-0.6	1.8	0.97
160	2018	icf3	77082	100.5	101.1	7.5	7.7	-0.6	1.7	0.98
161	2019	icf3	42803	100.1	100.5	6.8	6.9	-0.4	1.7	0.97
162	2020	icf3	363	101.9	102.1	6.2	6.3	-0.2	1.9	0.95
163	2010	icf	190701	92.2	92.9	6.5	6.7	-0.7	1.1	0.99
164	2011	icf	187622	93.5	94.3	6.3	6.5	-0.9	1.2	0.98
165	2012	icf	188197	93.8	94.7	6.4	6.6	-0.9	1.3	0.98
166	2013	icf	184975	94.9	95.8	6.3	6.4	-0.9	1.3	0.98
167	2014	icf	183746	96.4	97.3	6.3	6.5	-0.9	1.4	0.98
168	2015	icf	178465	96.6	97.3	6.6	6.7	-0.7	1.5	0.97
169	2016	icf	172299	97.5	98.1	6.8	7.0	-0.6	1.5	0.98
170	2017	icf	155773	97.8	98.3	6.7	6.9	-0.5	1.5	0.97
171	2018	icf	149509	99.7	100.2	7.1	7.3	-0.5	1.5	0.98
172	2019	icf	141685	98.9	99.2	6.6	6.7	-0.3	1.5	0.98
173	2020	icf	140207	99.8	99.8	6.6	6.6	0.1	1.5	0.97
174	2021	icf	89672	100.0	99.7	6.1	5.9	0.3	1.7	0.96
175	2022	icf	131	99.8	99.0	5.2	5.0	0.8	2.2	0.91
176	2010	ifl0	188612	94.5	94.1	6.4	6.4	0.4	1.5	0.97
177	2011	ifl0	190724	94.2	94.3	6.2	6.2	-0.1	1.7	0.96
178	2012	ifl0	193576	94.5	94.8	6.1	6.1	-0.3	1.8	0.95
179	2013	ifl0	190725	95.0	95.5	6.0	6.0	-0.5	2.0	0.95
180	2014	ifl0	192388	95.6	96.2	6.6	6.5	-0.6	2.1	0.95
181	2015	ifl0	183705	95.9	96.4	6.5	6.5	-0.5	2.1	0.95
182	2016	ifl0	178499	97.0	97.3	7.2	7.2	-0.4	2.2	0.95
183	2017	ifl0	158533	98.1	98.4	7.4	7.4	-0.3	2.2	0.96
184	2018	ifl0	152603	97.4	97.8	7.1	7.1	-0.4	2.2	0.95
185	2019	ifl0	147347	98.9	99.3	7.3	7.3	-0.4	2.2	0.96

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	2020	ifl0	150362	100.0	99.9	6.6	6.6	0.1	2.1	0.95
187	2021	ifl0	166240	101.6	101.1	6.8	6.8	0.5	2.0	0.96
188	2022	ifl0	122078	101.9	100.9	6.7	6.7	1.0	2.1	0.95
189	2023	ifl0	234	101.8	100.2	6.4	6.4	1.6	2.5	0.92
190	2010	ifl1	180679	88.4	89.6	6.8	7.1	-1.1	1.3	0.98
191	2011	ifl1	178372	89.2	90.5	6.8	7.0	-1.4	1.5	0.98
192	2012	ifl1	179262	89.6	91.0	6.9	7.2	-1.5	1.6	0.98
193	2013	ifl1	175884	90.7	92.2	6.5	6.7	-1.5	1.6	0.97
194	2014	ifl1	174777	92.2	93.7	6.6	6.7	-1.5	1.7	0.97
195	2015	ifl1	169984	92.9	94.1	6.6	6.6	-1.2	1.8	0.96
196	2016	ifl1	164133	94.7	95.6	7.2	7.2	-0.9	1.9	0.97
197	2017	ifl1	148753	96.2	96.8	7.3	7.3	-0.7	1.9	0.97
198	2018	ifl1	143107	97.7	98.2	7.2	7.2	-0.6	1.8	0.97
199	2019	ifl1	136277	98.2	98.5	7.2	7.2	-0.3	1.8	0.97
200	2020	ifl1	136958	100.1	100.0	7.2	7.2	0.1	1.8	0.97
201	2021	ifl1	91751	101.0	100.6	6.8	6.8	0.4	1.9	0.96
202	2022	ifl1	524	101.8	100.7	6.5	6.3	1.1	2.4	0.93
203	2010	ifl2	134000	88.6	90.0	7.1	7.3	-1.4	1.5	0.98
204	2011	ifl2	132854	89.3	90.8	7.2	7.4	-1.6	1.6	0.98
205	2012	ifl2	133647	89.7	91.3	7.5	7.7	-1.6	1.7	0.98
206	2013	ifl2	131959	90.7	92.3	6.9	7.1	-1.7	1.8	0.97
207	2014	ifl2	133912	92.6	94.2	7.4	7.6	-1.6	1.9	0.97
208	2015	ifl2	130237	92.7	94.0	7.1	7.2	-1.3	2.0	0.96
209	2016	ifl2	127957	94.7	95.6	7.8	7.8	-1.0	2.0	0.97
210	2017	ifl2	117500	96.3	97.1	8.0	8.1	-0.8	2.0	0.97
211	2018	ifl2	112780	97.8	98.4	8.0	8.1	-0.6	1.9	0.97
212	2019	ifl2	107018	98.3	98.6	7.7	7.8	-0.3	1.9	0.97
213	2020	ifl2	69013	100.8	100.8	7.7	7.7	0.0	2.0	0.97
214	2021	ifl2	815	102.8	102.6	7.1	7.0	0.2	2.1	0.96
215	2010	ifl3	81716	88.5	90.1	7.4	7.7	-1.6	1.7	0.98
216	2011	ifl3	82513	89.3	91.2	7.4	7.7	-1.9	1.8	0.97
217	2012	ifl3	84199	89.8	91.7	7.6	7.9	-1.9	1.9	0.97
218	2013	ifl3	85450	90.8	92.8	7.1	7.4	-1.9	2.0	0.96
219	2014	ifl3	87021	92.9	94.8	7.8	8.0	-1.9	2.1	0.96
220	2015	ifl3	85993	93.1	94.5	7.3	7.4	-1.4	2.2	0.96
221	2016	ifl3	86213	95.0	96.1	7.8	8.0	-1.1	2.2	0.96
222	2017	ifl3	79768	96.9	97.8	8.2	8.3	-0.9	2.2	0.96

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
223	2018	ifl3	76686	98.5	99.2	8.2	8.4	-0.7	2.1	0.97
224	2019	ifl3	44147	99.7	100.2	7.6	7.7	-0.5	2.1	0.96
225	2020	ifl3	795	102.3	102.6	7.8	8.0	-0.3	2.1	0.96
226	2010	ifl	225028	87.9	89.3	6.9	7.2	-1.4	1.3	0.98
227	2011	ifl	225519	88.6	90.2	6.9	7.2	-1.6	1.4	0.98
228	2012	ifl	227491	89.1	90.8	7.1	7.4	-1.7	1.5	0.98
229	2013	ifl	222682	90.1	91.8	6.6	6.9	-1.7	1.6	0.97
230	2014	ifl	223632	91.9	93.6	7.0	7.2	-1.7	1.7	0.97
231	2015	ifl	214604	92.3	93.7	6.8	6.9	-1.4	1.8	0.97
232	2016	ifl	207473	94.2	95.2	7.4	7.5	-1.1	1.8	0.97
233	2017	ifl	185750	95.8	96.7	7.7	7.8	-0.8	1.9	0.97
234	2018	ifl	177601	97.4	98.0	7.7	7.8	-0.7	1.8	0.97
235	2019	ifl	169264	98.0	98.3	7.4	7.5	-0.4	1.8	0.97
236	2020	ifl	171642	100.0	99.9	7.4	7.4	0.1	1.9	0.97
237	2021	ifl	177650	100.8	100.1	6.6	6.5	0.6	2.2	0.95
238	2022	ifl	122180	102.1	100.2	6.6	5.9	1.9	3.0	0.89
239	2023	ifl	234	101.0	98.8	6.6	5.6	2.1	3.2	0.87
240	2010	ais0	190875	97.3	96.1	6.4	6.5	1.2	1.5	0.97
241	2011	ais0	192532	96.6	95.8	6.4	6.4	0.8	1.7	0.97
242	2012	ais0	194939	96.5	95.9	6.4	6.5	0.6	1.8	0.96
243	2013	ais0	191381	97.0	96.6	6.3	6.3	0.4	1.9	0.95
244	2014	ais0	192375	97.3	97.1	6.6	6.6	0.2	2.0	0.95
245	2015	ais0	184101	97.3	97.2	6.8	6.7	0.1	2.1	0.95
246	2016	ais0	179092	98.3	98.2	7.4	7.4	0.1	2.2	0.96
247	2017	ais0	158875	99.0	99.0	7.4	7.4	0.0	2.1	0.96
248	2018	ais0	152630	97.9	98.1	7.1	7.1	-0.1	2.1	0.96
249	2019	ais0	147188	99.2	99.4	7.2	7.3	-0.2	2.1	0.96
250	2020	ais0	150165	100.0	99.9	6.7	6.7	0.0	2.1	0.95
251	2021	ais0	167407	101.2	100.8	6.7	6.8	0.3	2.0	0.96
252	2022	ais0	123919	101.1	100.5	6.7	6.8	0.6	2.0	0.95
253	2023	ais0	233	101.1	100.1	7.1	6.9	1.0	2.5	0.94
254	2010	ais1	177499	93.6	94.5	6.8	7.0	-0.9	1.4	0.98
255	2011	ais1	175081	93.6	94.7	7.0	7.1	-1.1	1.5	0.98
256	2012	ais1	176101	93.6	94.9	6.9	7.1	-1.2	1.6	0.97
257	2013	ais1	172865	94.4	95.6	6.7	6.8	-1.2	1.6	0.97
258	2014	ais1	172018	95.3	96.5	6.6	6.7	-1.2	1.8	0.96
259	2015	ais1	167573	95.5	96.5	6.5	6.5	-1.0	1.8	0.96

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
260	2016	ais1	161873	96.7	97.5	7.0	7.0	-0.8	1.9	0.96
261	2017	ais1	146817	98.0	98.5	7.0	7.0	-0.5	1.9	0.96
262	2018	ais1	141219	98.5	98.9	6.8	6.8	-0.5	1.8	0.96
263	2019	ais1	134592	98.7	98.9	7.0	7.0	-0.2	1.8	0.97
264	2020	ais1	135425	100.1	100.0	6.9	6.9	0.0	1.8	0.97
265	2021	ais1	86333	100.5	100.2	6.5	6.5	0.3	2.0	0.95
266	2022	ais1	101	100.9	100.2	6.9	6.5	0.7	2.4	0.94
267	2010	ais2	131168	94.2	95.0	7.0	7.2	-0.8	1.5	0.98
268	2011	ais2	130160	94.0	95.0	7.3	7.4	-1.0	1.7	0.97
269	2012	ais2	131261	93.9	95.0	7.7	7.9	-1.1	1.8	0.97
270	2013	ais2	129763	94.4	95.6	7.4	7.5	-1.1	1.8	0.97
271	2014	ais2	131797	95.9	97.0	7.4	7.5	-1.1	2.0	0.96
272	2015	ais2	128219	95.4	96.3	7.2	7.2	-0.9	2.1	0.96
273	2016	ais2	126074	96.8	97.5	7.7	7.7	-0.7	2.1	0.96
274	2017	ais2	115839	98.1	98.6	7.6	7.6	-0.5	2.1	0.96
275	2018	ais2	111230	98.4	98.8	7.5	7.5	-0.4	2.0	0.96
276	2019	ais2	105602	98.7	98.9	7.5	7.6	-0.2	2.0	0.97
277	2020	ais2	64230	100.6	100.6	7.3	7.3	0.0	2.0	0.96
278	2021	ais2	259	102.1	102.0	6.6	6.3	0.2	2.3	0.94
279	2010	ais3	79507	95.0	96.0	7.2	7.5	-1.0	1.7	0.97
280	2011	ais3	80476	94.7	95.9	7.4	7.7	-1.2	1.9	0.97
281	2012	ais3	82399	94.7	96.0	7.8	8.0	-1.3	2.0	0.97
282	2013	ais3	83732	95.2	96.5	7.5	7.7	-1.3	2.0	0.96
283	2014	ais3	85246	96.6	97.9	7.6	7.8	-1.3	2.2	0.96
284	2015	ais3	84298	96.1	97.2	7.2	7.3	-1.0	2.3	0.95
285	2016	ais3	84624	97.4	98.2	7.6	7.8	-0.8	2.3	0.96
286	2017	ais3	78301	98.7	99.4	7.6	7.7	-0.7	2.3	0.96
287	2018	ais3	75204	98.9	99.3	7.6	7.8	-0.5	2.2	0.96
288	2019	ais3	40799	99.8	100.3	7.5	7.6	-0.4	2.2	0.96
289	2020	ais3	323	101.7	101.8	6.7	6.7	-0.1	2.4	0.93
290	2010	ais	225265	94.0	94.9	6.7	6.9	-0.9	1.3	0.98
291	2011	ais	225727	93.8	94.9	6.9	7.1	-1.1	1.5	0.98
292	2012	ais	227421	93.8	95.0	7.2	7.4	-1.2	1.6	0.98
293	2013	ais	222501	94.3	95.6	6.9	7.0	-1.3	1.6	0.97
294	2014	ais	223292	95.5	96.8	6.8	6.9	-1.2	1.7	0.97
295	2015	ais	214315	95.3	96.4	6.6	6.7	-1.0	1.8	0.96
296	2016	ais	207378	96.6	97.4	7.1	7.2	-0.8	1.8	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
297	2017	ais	185674	97.9	98.6	7.1	7.2	-0.6	1.9	0.97
298	2018	ais	177506	98.2	98.7	6.9	7.0	-0.5	1.8	0.97
299	2019	ais	169209	98.6	98.8	7.0	7.1	-0.3	1.8	0.97
300	2020	ais	171580	100.1	100.0	6.7	6.7	0.1	1.9	0.96
301	2021	ais	178786	100.5	100.0	6.1	6.0	0.4	2.2	0.94
302	2022	ais	123961	101.3	100.1	6.1	5.6	1.3	2.8	0.89
303	2023	ais	233	100.4	98.9	6.1	5.4	1.5	3.1	0.87
304	2010	hst0	37083	98.2	97.5	7.7	7.7	0.7	1.7	0.98
305	2011	hst0	37878	98.8	98.3	7.1	7.0	0.5	1.7	0.97
306	2012	hst0	37728	99.3	98.9	6.9	6.9	0.4	1.9	0.96
307	2013	hst0	37039	99.4	99.0	7.4	7.4	0.4	1.9	0.97
308	2014	hst0	35668	99.9	99.6	7.3	7.2	0.3	2.0	0.96
309	2015	hst0	34740	99.6	99.4	7.1	6.9	0.2	2.2	0.95
310	2016	hst0	33941	99.4	99.4	7.1	6.9	-0.1	2.1	0.95
311	2017	hst0	32054	99.4	99.4	7.4	7.3	0.0	2.2	0.95
312	2018	hst0	32277	99.4	99.7	7.1	7.0	-0.3	2.2	0.95
313	2019	hst0	31492	99.7	99.7	7.2	7.2	0.0	2.2	0.95
314	2020	hst0	32612	99.0	99.0	6.6	6.6	0.0	2.2	0.94
315	2021	hst0	31613	99.0	98.9	6.5	6.6	0.1	2.3	0.94
316	2022	hst0	19739	98.7	98.2	6.2	6.1	0.5	2.5	0.92
317	2023	hst0	2	.	.	.	.	.	.	1.00
318	2010	hst1	35969	94.4	95.0	6.8	6.9	-0.6	1.5	0.98
319	2011	hst1	36562	95.4	96.1	6.6	6.8	-0.7	1.6	0.97
320	2012	hst1	36034	95.3	96.1	6.8	6.9	-0.8	1.7	0.97
321	2013	hst1	34535	96.0	96.8	6.6	6.8	-0.8	1.7	0.97
322	2014	hst1	34115	96.9	97.8	6.5	6.6	-0.8	1.8	0.96
323	2015	hst1	33675	97.1	98.0	6.8	6.9	-0.8	1.9	0.96
324	2016	hst1	32617	97.5	98.4	6.8	6.9	-0.9	1.9	0.96
325	2017	hst1	31356	97.7	98.3	6.8	6.7	-0.6	1.9	0.96
326	2018	hst1	31507	98.5	98.9	6.9	6.9	-0.4	1.9	0.96
327	2019	hst1	30259	98.4	98.8	6.7	6.6	-0.4	1.9	0.96
328	2020	hst1	31583	98.3	98.5	6.5	6.4	-0.2	1.9	0.96
329	2021	hst1	15949	98.6	98.5	6.1	6.1	0.1	2.1	0.94
330	2022	hst1	11	.	.	.	.	.	.	0.84
331	2010	hst2	25682	93.1	93.6	6.7	6.9	-0.5	1.6	0.97
332	2011	hst2	25786	94.1	94.6	6.7	6.9	-0.5	1.7	0.97
333	2012	hst2	24969	94.4	94.9	6.9	6.9	-0.5	1.7	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
334	2013	hst2	24941	95.4	95.9	6.8	6.8	-0.5	1.8	0.97
335	2014	hst2	24766	96.5	96.9	6.7	6.7	-0.5	1.8	0.96
336	2015	hst2	24709	96.6	97.0	7.4	7.3	-0.4	2.0	0.96
337	2016	hst2	24479	97.3	97.8	7.4	7.4	-0.4	2.0	0.96
338	2017	hst2	23802	97.5	97.8	7.4	7.4	-0.3	2.0	0.96
339	2018	hst2	23822	98.5	98.7	7.3	7.4	-0.2	2.0	0.96
340	2019	hst2	22256	98.6	98.6	7.0	7.0	0.0	2.1	0.96
341	2020	hst2	11612	99.1	99.0	7.0	7.2	0.1	2.1	0.96
342	2021	hst2	29	101.3	101.7	5.7	5.6	-0.3	2.4	0.91
343	2010	hst3	14925	94.2	94.6	6.9	7.0	-0.4	1.7	0.97
344	2011	hst3	14911	95.1	95.6	6.7	6.9	-0.5	1.7	0.97
345	2012	hst3	14680	95.1	95.6	6.9	7.1	-0.5	1.9	0.97
346	2013	hst3	15071	95.8	96.3	7.0	7.0	-0.4	1.9	0.96
347	2014	hst3	15106	96.8	97.2	6.7	6.8	-0.4	2.0	0.96
348	2015	hst3	15543	97.4	97.7	7.4	7.3	-0.4	2.1	0.96
349	2016	hst3	15569	97.7	98.1	7.3	7.2	-0.4	2.0	0.96
350	2017	hst3	15047	97.8	98.2	7.2	7.2	-0.4	2.0	0.96
351	2018	hst3	14428	98.8	98.8	7.4	7.5	-0.1	2.0	0.96
352	2019	hst3	6472	99.1	99.0	7.0	7.0	0.0	2.1	0.95
353	2020	hst3	39	98.3	98.9	6.9	7.1	-0.6	2.3	0.95
354	2010	hst	47885	93.3	93.8	6.4	6.5	-0.5	1.3	0.98
355	2011	hst	48535	94.3	94.9	6.4	6.5	-0.6	1.4	0.98
356	2012	hst	48258	94.3	95.0	6.6	6.6	-0.6	1.5	0.97
357	2013	hst	47261	95.2	95.8	6.5	6.5	-0.6	1.5	0.97
358	2014	hst	45780	96.2	96.8	6.4	6.4	-0.6	1.6	0.97
359	2015	hst	44629	96.5	97.1	6.9	6.9	-0.6	1.7	0.97
360	2016	hst	43311	97.0	97.6	6.9	6.9	-0.6	1.7	0.97
361	2017	hst	41219	97.2	97.7	6.8	6.7	-0.5	1.7	0.97
362	2018	hst	40737	98.1	98.4	7.0	7.0	-0.2	1.7	0.97
363	2019	hst	38756	98.2	98.3	6.6	6.5	-0.1	1.8	0.96
364	2020	hst	39875	98.3	98.2	6.4	6.4	0.1	2.0	0.95
365	2021	hst	34726	98.4	98.0	5.9	5.7	0.5	2.3	0.92
366	2022	hst	19745	98.6	97.4	5.7	5.0	1.2	2.9	0.86
367	2023	hst	2	.	.	.	.	.	.	1.00
368	2010	fert	190701	88.9	90.1	6.9	7.2	-1.2	1.4	0.98
369	2011	fert	187622	89.5	90.9	7.0	7.2	-1.4	1.5	0.98
370	2012	fert	188197	89.9	91.4	7.2	7.4	-1.5	1.6	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
371	2013	fert	184975	90.9	92.5	6.7	6.9	-1.6	1.7	0.97
372	2014	fert	183746	92.7	94.2	6.9	7.1	-1.6	1.8	0.97
373	2015	fert	178465	92.9	94.2	6.8	6.9	-1.3	1.9	0.96
374	2016	fert	172299	94.7	95.7	7.4	7.5	-1.0	1.9	0.97
375	2017	fert	155773	96.3	97.1	7.7	7.8	-0.8	1.9	0.97
376	2018	fert	149509	97.6	98.2	7.5	7.6	-0.6	1.8	0.97
377	2019	fert	141685	98.1	98.5	7.4	7.5	-0.4	1.8	0.97
378	2020	fert	140207	100.1	100.0	7.3	7.3	0.1	1.9	0.97
379	2021	fert	89672	100.8	100.2	6.8	6.7	0.5	2.1	0.95
380	2022	fert	131	100.8	99.8	7.1	6.4	1.0	2.4	0.94

HOL SS and traditional breeding value for nongenotyped females with phenotype

Obs	diff	d_cr	d_nrr	d_icf	d_ifl	d_ais	d_hst	d_fert
1	-25	.	.	.	.	1	.	.
2	-23	1	.	.	.	.	.	.
3	-22	.	1	.	.	.	.	1
4	-21	.	.	.	1	.	.	.
5	-19	.	.	.	3	.	.	1
6	-18	3	.	.	2	.	.	1
7	-17	3	2	.	3	9	.	3
8	-16	5	5	2	14	8	.	11
9	-15	25	12	2	34	34	1	36
10	-14	52	28	10	58	70	3	65
11	-13	131	55	19	130	154	4	104
12	-12	278	148	53	282	246	14	240
13	-11	510	269	136	606	483	45	506
14	-10	996	582	308	1052	938	104	935
15	-9	1837	1154	692	1960	1765	233	1613
16	-8	3339	2446	1443	3495	3231	423	2947
17	-7	5948	4613	2964	6731	6608	825	5463
18	-6	11804	9364	5841	12934	12608	1828	10204
19	-5	25212	20371	11416	27706	24080	3835	20499
20	-4	61365	44502	23336	67528	53739	8269	48428
21	-3	199310	99251	54616	213675	131088	22348	144594
22	-2	684437	338796	213606	662992	454582	67919	500672
23	-1	809051	916283	843368	757329	902080	161688	656855
24	0	383376	623462	542682	376221	501353	144091	304264
25	1	173129	241400	153393	183072	213391	67296	128285
26	2	82472	116620	55686	92978	106351	31209	59370
27	3	46824	60990	24508	53197	55763	14489	30827
28	4	28991	37077	13285	32835	32531	7502	18031
29	5	19032	22765	7499	21102	21124	4052	11480
30	6	12524	13644	3957	14284	13560	2295	7121
31	7	7991	8261	2088	8283	7439	1010	4400
32	8	4519	4357	1080	5718	4377	487	2660
33	9	2438	2251	512	3229	2525	301	1540
34	10	1400	1213	253	1498	1326	208	867
35	11	820	595	121	787	684	136	452
36	12	398	285	67	440	339	66	240
37	13	216	184	26	250	174	24	126

HOL SS and traditional breeding value for nongenotyped females with phenotype

Obs	diff	d_cr	d_nrr	d_icf	d_ifl	d_ais	d_hst	d_fert
38	14	111	82	8	136	83	10	72
39	15	57	42	2	111	41	2	35
40	16	20	18	2	44	29	2	17
41	17	15	6	.	9	13	.	5
42	18	5	3	.	6	13	.	5
43	19	4	6	.	12	4	.	4
44	20	1	1	.	1	3	.	1
45	21	1	1	.	2	1	.	.
46	22	.	1	1	.	.	.	2
47	23	.	2	.	.	.	.	.

HOL SS and traditional breeding value for nongenotyped females with phenotype

Obs	diff	p_cr	p_nrr	p_icf	p_ifl	p_ais	p_hst	p_fert
1	-25	.	.	.	.	0	.	.
2	-23	0	.	.	.	.	.	.
3	-22	.	0	.	.	.	.	0
4	-21	.	.	.	0	.	.	.
5	-19	.	.	.	0	.	.	0
6	-18	0	.	.	0	.	.	0
7	-17	0	0	.	0	0	.	0
8	-16	0	0	0	0	0	.	0
9	-15	0	0	0	0	0	0	0
10	-14	0	0	0	0	0	0	0
11	-13	0	0	0	0	0	0	0
12	-12	0	0	0	0	0	0	0
13	-11	0	0	0	0	0	0	0
14	-10	0	0	0	0	0	0	0
15	-9	0	0	0	0	0	0	0
16	-8	0	0	0	0	0	0	0
17	-7	0	0	0	0	0	0	0
18	-6	0	0	0	1	0	0	1
19	-5	1	1	1	1	1	1	1
20	-4	2	2	1	3	2	2	2
21	-3	8	4	3	8	5	4	7
22	-2	27	13	11	26	18	13	26
23	-1	31	36	43	30	35	30	33
24	0	15	24	28	15	20	27	16
25	1	7	9	8	7	8	12	7
26	2	3	5	3	4	4	6	3
27	3	2	2	1	2	2	3	2
28	4	1	1	1	1	1	1	1
29	5	1	1	0	1	1	1	1
30	6	0	1	0	1	1	0	0
31	7	0	0	0	0	0	0	0
32	8	0	0	0	0	0	0	0
33	9	0	0	0	0	0	0	0
34	10	0	0	0	0	0	0	0
35	11	0	0	0	0	0	0	0
36	12	0	0	0	0	0	0	0
37	13	0	0	0	0	0	0	0

HOL SS and traditional breeding value for nongenotyped females with phenotype

Obs	diff	p_cr	p_nrr	p_icf	p_ifl	p_ais	p_hst	p_fert
38	14	0	0	0	0	0	0	0
39	15	0	0	0	0	0	0	0
40	16	0	0	0	0	0	0	0
41	17	0	0	.	0	0	.	0
42	18	0	0	.	0	0	.	0
43	19	0	0	.	0	0	.	0
44	20	0	0	.	0	0	.	0
45	21	0	0	.	0	0	.	.
46	22	.	0	0	.	.	.	0
47	23	.	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	cr0	193	930	2893	90.2	93.0	11.7	11.5	-2.8	4.5	0.92
2	2011	cr0	155	565	1191	90.5	92.7	10.7	10.2	-2.2	4.0	0.93
3	2012	cr0	171	816	1446	93.6	95.3	10.7	10.6	-1.7	3.7	0.94
4	2013	cr0	151	839	1538	95.4	96.7	12.5	12.1	-1.2	3.6	0.96
5	2014	cr0	114	1260	1534	96.8	97.4	12.7	12.9	-0.5	3.2	0.97
6	2015	cr0	83	1883	2315	101.1	101.4	12.1	12.4	-0.4	2.7	0.98
7	2016	cr0	66	1805	2289	100.6	101.6	12.2	12.7	-1.0	3.3	0.97
8	2017	cr0	66	1946	2315	101.3	101.5	14.0	14.0	-0.3	3.0	0.98
9	2018	cr0	78	1815	2612	104.5	103.9	13.2	12.6	0.7	3.2	0.97
10	2019	cr0	56	1446	2204	109.5	106.9	14.3	13.8	2.6	4.2	0.96
11	2020	cr0	24	286	372	106.3	103.0	9.7	9.3	3.4	5.2	0.85
12	2010	cr1	193	800	2470	90.7	93.9	10.2	10.4	-3.2	2.6	0.97
13	2011	cr1	155	490	1017	91.8	93.9	8.8	8.9	-2.1	2.6	0.96
14	2012	cr1	171	711	1250	94.9	96.4	9.5	10.0	-1.5	2.4	0.97
15	2013	cr1	151	735	1338	97.1	98.4	10.1	10.2	-1.2	2.5	0.97
16	2014	cr1	113	1105	1323	98.3	98.4	9.7	10.3	-0.1	2.0	0.98
17	2015	cr1	83	1634	2007	104.3	104.2	9.1	9.6	0.0	2.0	0.98
18	2016	cr1	66	1556	1949	103.2	103.2	8.7	9.5	0.0	2.0	0.98
19	2017	cr1	66	1636	1928	104.4	103.3	11.4	11.7	1.2	2.0	0.98
20	2018	cr1	78	1106	1623	107.5	105.8	9.6	9.5	1.7	2.9	0.95
21	2019	cr1	24	407	641	109.7	106.8	10.0	9.9	3.0	3.3	0.94
22	2010	cr2	193	604	1882	90.5	93.6	9.9	10.0	-3.1	2.6	0.97
23	2011	cr2	155	374	795	92.3	94.3	9.2	9.3	-2.0	2.6	0.96
24	2012	cr2	171	551	972	95.1	96.8	10.1	10.4	-1.7	2.4	0.97
25	2013	cr2	151	571	1047	96.6	97.8	10.5	10.8	-1.2	2.5	0.97
26	2014	cr2	113	872	1049	98.8	99.0	9.8	10.4	-0.2	2.0	0.98
27	2015	cr2	83	1301	1617	104.1	104.2	9.2	10.0	0.0	2.4	0.97
28	2016	cr2	66	1218	1531	103.3	102.9	9.4	10.1	0.4	1.8	0.99
29	2017	cr2	66	975	1158	105.0	103.5	11.0	11.7	1.5	2.2	0.98
30	2018	cr2	42	287	459	108.1	106.8	7.5	8.0	1.4	2.4	0.95
31	2010	cr3	193	391	1233	90.3	93.4	9.7	9.9	-3.1	2.6	0.97
32	2011	cr3	154	247	532	92.5	94.5	9.1	9.2	-2.0	2.5	0.96
33	2012	cr3	171	367	643	95.4	97.0	10.0	10.3	-1.6	2.5	0.97
34	2013	cr3	151	376	652	96.5	97.7	10.6	10.9	-1.3	2.5	0.97
35	2014	cr3	113	604	740	99.0	99.2	9.8	10.3	-0.2	2.0	0.98
36	2015	cr3	82	904	1149	104.3	104.5	9.4	10.1	-0.2	2.3	0.98
37	2016	cr3	65	623	824	103.9	103.5	9.3	10.0	0.3	2.0	0.98

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	2017	cr3	39	144	180	102.7	101.5	11.9	12.2	1.2	1.8	0.99
39	2010	cr	193	997	3073	90.3	93.5	9.9	10.1	-3.1	2.6	0.97
40	2011	cr	155	611	1268	92.1	94.2	9.0	9.1	-2.1	2.5	0.96
41	2012	cr	171	883	1546	95.1	96.8	9.9	10.2	-1.7	2.4	0.97
42	2013	cr	151	908	1638	96.6	97.9	10.4	10.8	-1.3	2.5	0.97
43	2014	cr	114	1352	1629	98.8	98.9	9.7	10.2	-0.1	1.8	0.99
44	2015	cr	83	2005	2443	104.4	104.4	9.2	9.9	0.0	2.3	0.97
45	2016	cr	66	1909	2398	103.5	103.3	9.1	9.8	0.3	1.9	0.98
46	2017	cr	66	2043	2405	104.8	103.5	11.0	11.6	1.3	2.2	0.98
47	2018	cr	78	1871	2669	107.7	105.7	9.0	8.9	2.0	3.1	0.94
48	2019	cr	56	1453	2215	109.7	104.9	9.6	8.3	4.8	5.7	0.81
49	2020	cr	24	286	372	111.1	104.9	7.3	6.1	6.2	5.9	0.63
50	2010	nrr0	193	892	2781	94.5	96.5	11.3	11.4	-2.0	4.7	0.91
51	2011	nrr0	155	540	1143	94.3	95.8	11.2	11.1	-1.4	4.3	0.93
52	2012	nrr0	171	782	1387	96.2	97.5	10.6	10.7	-1.3	3.7	0.94
53	2013	nrr0	151	804	1475	97.3	98.2	12.4	12.6	-0.9	3.6	0.96
54	2014	nrr0	114	1214	1480	96.2	96.6	12.3	12.6	-0.4	3.4	0.96
55	2015	nrr0	83	1812	2234	99.5	100.4	11.8	12.1	-0.9	2.5	0.98
56	2016	nrr0	66	1737	2208	98.0	99.5	12.3	13.0	-1.5	3.1	0.97
57	2017	nrr0	66	1877	2239	98.0	99.0	13.4	13.1	-1.0	3.3	0.97
58	2018	nrr0	78	1769	2558	100.8	101.1	12.8	12.3	-0.3	3.8	0.95
59	2019	nrr0	56	1632	2406	104.2	102.8	14.2	14.0	1.4	3.1	0.98
60	2020	nrr0	37	483	773	100.6	99.3	11.0	9.9	1.4	5.6	0.86
61	2010	nrr1	193	766	2371	94.3	96.4	9.8	10.1	-2.1	3.1	0.95
62	2011	nrr1	155	470	976	94.9	96.3	9.1	9.2	-1.4	3.1	0.94
63	2012	nrr1	171	684	1204	96.7	97.7	9.5	9.7	-1.0	2.8	0.96
64	2013	nrr1	151	706	1288	98.7	99.7	9.7	9.9	-1.0	3.0	0.95
65	2014	nrr1	113	1064	1276	98.1	98.0	9.1	9.6	0.0	2.6	0.96
66	2015	nrr1	83	1578	1941	103.2	103.0	9.5	9.9	0.2	2.5	0.97
67	2016	nrr1	66	1504	1886	101.8	101.8	8.9	9.3	0.0	2.4	0.97
68	2017	nrr1	66	1593	1884	102.5	101.8	10.6	10.8	0.7	2.3	0.98
69	2018	nrr1	78	1189	1706	104.2	103.2	9.6	9.1	1.0	3.4	0.94
70	2019	nrr1	35	510	831	108.0	105.1	10.5	9.8	2.9	4.4	0.91
71	2010	nrr2	193	580	1809	92.7	94.5	9.6	9.7	-1.8	3.2	0.94
72	2011	nrr2	155	359	764	94.4	95.4	9.5	9.6	-1.0	3.3	0.94
73	2012	nrr2	171	530	936	95.4	96.3	10.1	10.0	-0.9	2.9	0.96
74	2013	nrr2	151	549	1010	96.5	97.1	10.9	11.2	-0.7	3.2	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
75	2014	nrr2	113	841	1015	97.7	97.7	9.1	9.4	-0.1	3.0	0.95
76	2015	nrr2	83	1259	1569	102.0	101.9	9.7	10.4	0.1	3.0	0.96
77	2016	nrr2	66	1189	1500	100.6	100.7	11.2	11.8	-0.1	2.0	0.99
78	2017	nrr2	66	1082	1268	102.3	101.7	11.4	11.6	0.5	2.5	0.98
79	2018	nrr2	56	402	637	105.4	104.3	9.0	9.1	1.1	3.3	0.93
80	2010	nrr3	193	374	1179	93.2	94.7	9.8	9.9	-1.5	3.4	0.94
81	2011	nrr3	154	236	509	95.0	96.0	9.9	10.1	-1.0	3.5	0.94
82	2012	nrr3	171	352	620	96.5	96.8	10.9	10.7	-0.3	3.7	0.94
83	2013	nrr3	151	363	643	96.7	97.2	11.6	12.0	-0.5	3.6	0.95
84	2014	nrr3	113	581	712	98.3	98.0	10.1	10.6	0.2	3.2	0.95
85	2015	nrr3	82	887	1132	102.4	102.6	11.0	11.7	-0.2	3.3	0.96
86	2016	nrr3	65	706	907	102.4	102.3	11.8	12.2	0.0	2.9	0.97
87	2017	nrr3	56	224	311	102.7	102.6	11.2	11.9	0.2	3.1	0.96
88	2010	nrr	193	984	3034	93.4	95.2	9.3	9.5	-1.8	2.9	0.95
89	2011	nrr	155	602	1250	94.9	95.9	9.0	9.2	-1.0	2.9	0.95
90	2012	nrr	171	871	1525	96.2	96.9	9.9	9.8	-0.6	2.8	0.96
91	2013	nrr	151	896	1619	97.3	97.9	10.4	10.7	-0.6	3.0	0.96
92	2014	nrr	114	1336	1612	98.2	98.1	9.0	9.4	0.1	2.6	0.96
93	2015	nrr	83	1983	2421	102.6	102.6	9.6	10.2	0.0	2.7	0.96
94	2016	nrr	66	1889	2375	101.8	101.8	10.3	10.6	0.0	2.2	0.98
95	2017	nrr	66	2024	2385	102.3	101.8	10.7	11.1	0.5	2.5	0.97
96	2018	nrr	78	1870	2676	104.6	103.3	9.3	8.2	1.3	3.8	0.91
97	2019	nrr	56	1650	2436	106.3	102.9	9.6	8.3	3.4	5.7	0.80
98	2020	nrr	37	483	773	105.3	101.5	8.2	4.9	3.8	6.6	0.59
99	2010	icf1	193	776	2400	97.1	98.4	9.5	9.5	-1.3	2.3	0.97
100	2011	icf1	155	475	986	98.4	99.5	8.9	8.9	-1.1	1.9	0.98
101	2012	icf1	171	691	1215	98.6	99.5	9.8	9.8	-0.9	2.1	0.98
102	2013	icf1	151	714	1302	100.1	100.4	9.7	9.8	-0.2	2.2	0.98
103	2014	icf1	113	1075	1289	101.7	101.7	9.2	9.2	0.0	1.8	0.98
104	2015	icf1	83	1595	1962	103.2	103.0	8.2	8.3	0.1	1.2	0.99
105	2016	icf1	66	1520	1906	103.2	103.4	8.9	9.0	-0.3	1.4	0.99
106	2017	icf1	66	1611	1904	104.2	103.0	7.7	7.9	1.2	1.5	0.98
107	2018	icf1	78	1197	1719	104.6	103.4	7.5	7.4	1.2	2.1	0.96
108	2019	icf1	35	485	812	100.7	99.6	8.0	6.1	1.1	4.3	0.85
109	2010	icf2	193	588	1833	96.6	98.2	9.4	9.2	-1.6	2.5	0.96
110	2011	icf2	155	363	774	97.7	98.8	8.9	8.9	-1.1	2.0	0.97
111	2012	icf2	171	537	948	98.5	99.4	10.1	10.2	-0.8	2.1	0.98

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	2013	icf2	151	556	1024	99.7	100.0	10.6	10.5	-0.4	2.3	0.98
113	2014	icf2	113	851	1025	101.7	101.8	9.8	9.9	-0.1	1.8	0.98
114	2015	icf2	83	1274	1585	103.2	103.2	9.6	9.9	0.0	1.4	0.99
115	2016	icf2	66	1203	1516	103.4	103.4	9.7	9.9	0.0	1.4	0.99
116	2017	icf2	66	1089	1274	104.5	103.5	9.0	9.2	0.9	1.8	0.98
117	2018	icf2	53	392	628	104.7	103.8	8.2	7.8	0.9	1.6	0.98
118	2010	icf3	193	381	1202	96.4	98.2	9.5	9.4	-1.7	2.9	0.95
119	2011	icf3	154	240	518	97.7	98.8	9.4	9.5	-1.1	2.5	0.97
120	2012	icf3	171	358	632	98.8	100.0	10.4	10.4	-1.2	2.4	0.97
121	2013	icf3	151	369	654	99.6	100.1	11.3	11.2	-0.5	2.8	0.97
122	2014	icf3	113	590	723	102.0	102.3	10.7	10.7	-0.3	1.9	0.98
123	2015	icf3	82	903	1150	103.3	103.3	10.1	10.7	0.0	1.7	0.99
124	2016	icf3	65	715	920	104.1	104.2	10.2	10.8	-0.1	1.5	0.99
125	2017	icf3	54	213	299	104.9	103.7	9.7	9.9	1.2	2.3	0.97
126	2010	icf	193	807	2493	96.6	98.3	9.4	9.3	-1.6	2.5	0.96
127	2011	icf	155	494	1025	97.9	99.1	9.0	9.1	-1.2	2.0	0.98
128	2012	icf	171	718	1261	98.6	99.7	10.1	10.1	-1.1	2.1	0.98
129	2013	icf	151	741	1348	99.8	100.1	10.6	10.5	-0.4	2.4	0.97
130	2014	icf	113	1114	1336	101.9	102.1	9.9	10.0	-0.2	1.7	0.98
131	2015	icf	83	1650	2025	103.3	103.4	9.4	9.8	-0.1	1.4	0.99
132	2016	icf	66	1568	1965	103.7	103.7	9.7	9.9	0.0	1.2	0.99
133	2017	icf	66	1650	1948	104.7	103.5	8.6	8.7	1.2	1.8	0.98
134	2018	icf	78	1207	1736	104.9	103.4	7.9	7.7	1.5	2.4	0.95
135	2019	icf	35	485	812	100.9	99.5	8.3	6.1	1.3	4.7	0.83
136	2010	ifl0	193	865	2703	94.4	97.0	11.1	11.1	-2.6	4.3	0.93
137	2011	ifl0	155	523	1109	94.5	96.6	10.0	10.0	-2.1	4.1	0.92
138	2012	ifl0	171	760	1348	96.5	98.2	10.5	10.7	-1.7	3.7	0.94
139	2013	ifl0	151	780	1431	97.4	98.7	11.2	11.5	-1.2	3.7	0.95
140	2014	ifl0	114	1182	1442	97.5	97.9	11.7	11.9	-0.4	3.6	0.95
141	2015	ifl0	83	1762	2175	100.3	101.2	11.0	11.4	-0.9	2.8	0.97
142	2016	ifl0	66	1695	2154	99.6	101.0	11.6	12.4	-1.4	3.0	0.97
143	2017	ifl0	66	1834	2191	99.5	100.1	13.1	12.8	-0.6	2.9	0.98
144	2018	ifl0	78	1732	2505	102.4	101.8	12.0	11.7	0.6	3.7	0.95
145	2019	ifl0	56	1604	2364	104.9	103.1	13.5	13.2	1.7	3.3	0.97
146	2020	ifl0	37	479	767	102.0	99.6	10.0	9.1	2.4	5.3	0.85
147	2010	ifl1	193	772	2387	92.0	95.3	10.8	10.9	-3.3	2.6	0.97
148	2011	ifl1	155	472	980	93.3	95.4	8.9	8.8	-2.1	2.5	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	2012	ifl1	171	687	1208	95.5	97.0	10.3	10.7	-1.4	2.5	0.97
150	2013	ifl1	151	710	1296	98.3	99.4	10.1	10.4	-1.1	2.7	0.97
151	2014	ifl1	113	1069	1282	99.2	99.3	10.0	10.4	0.0	2.1	0.98
152	2015	ifl1	83	1588	1955	104.4	104.2	9.8	10.4	0.2	2.1	0.98
153	2016	ifl1	66	1513	1897	103.9	104.0	8.4	8.8	0.0	1.7	0.98
154	2017	ifl1	66	1603	1897	105.0	103.7	11.1	11.4	1.3	2.3	0.98
155	2018	ifl1	78	1200	1721	107.5	105.7	8.8	8.7	1.8	2.4	0.96
156	2019	ifl1	35	517	841	107.8	103.8	10.2	8.9	4.0	4.0	0.92
157	2010	ifl2	193	585	1822	91.2	94.5	10.7	10.7	-3.2	2.9	0.96
158	2011	ifl2	155	361	768	93.0	95.1	9.6	9.4	-2.1	2.8	0.96
159	2012	ifl2	171	533	941	95.1	96.6	11.2	11.5	-1.6	2.6	0.97
160	2013	ifl2	151	553	1019	97.4	98.4	11.2	11.4	-1.0	2.7	0.97
161	2014	ifl2	113	847	1020	99.4	99.5	10.6	11.0	-0.1	2.1	0.98
162	2015	ifl2	83	1267	1579	104.3	104.1	10.9	11.6	0.2	2.5	0.98
163	2016	ifl2	66	1198	1509	103.7	103.5	9.8	10.3	0.2	1.7	0.99
164	2017	ifl2	66	1094	1282	105.6	104.1	11.8	12.4	1.5	2.4	0.98
165	2018	ifl2	56	409	647	108.7	107.0	8.3	8.6	1.7	2.4	0.96
166	2010	ifl3	193	378	1194	90.5	93.8	10.7	10.8	-3.3	3.3	0.95
167	2011	ifl3	154	239	514	92.7	95.0	9.8	9.8	-2.3	2.8	0.96
168	2012	ifl3	171	356	628	95.3	96.9	11.5	11.7	-1.6	3.0	0.97
169	2013	ifl3	151	368	653	96.9	98.0	11.7	11.9	-1.1	3.1	0.97
170	2014	ifl3	113	587	719	99.9	100.1	11.0	11.3	-0.2	2.4	0.98
171	2015	ifl3	82	898	1145	104.5	104.5	11.6	12.6	0.0	2.7	0.98
172	2016	ifl3	65	717	921	104.8	104.5	9.8	10.2	0.3	2.0	0.98
173	2017	ifl3	56	229	318	106.4	105.1	12.3	13.2	1.3	2.8	0.98
174	2010	ifl	193	978	3016	91.2	94.5	10.5	10.6	-3.3	2.8	0.96
175	2011	ifl	155	598	1243	93.0	95.2	9.1	9.1	-2.2	2.5	0.96
176	2012	ifl	171	866	1517	95.4	96.8	10.8	11.1	-1.5	2.5	0.97
177	2013	ifl	151	890	1609	97.5	98.5	10.8	11.0	-1.0	2.7	0.97
178	2014	ifl	114	1329	1603	99.5	99.7	10.3	10.6	-0.2	2.1	0.98
179	2015	ifl	83	1972	2408	104.4	104.3	10.6	11.3	0.1	2.4	0.98
180	2016	ifl	66	1878	2360	104.2	104.1	9.0	9.4	0.1	1.6	0.99
181	2017	ifl	66	2012	2371	105.5	104.1	11.2	11.9	1.4	2.6	0.98
182	2018	ifl	78	1850	2646	107.8	105.6	8.4	8.2	2.2	3.0	0.93
183	2019	ifl	56	1625	2398	107.7	103.2	9.9	7.9	4.5	5.4	0.84
184	2020	ifl	37	479	767	109.8	103.4	7.3	5.3	6.5	6.2	0.55
185	2010	ais0	193	872	2720	95.7	97.4	10.9	11.3	-1.7	4.6	0.92

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
186	2011	ais0	155	527	1119	95.6	97.0	10.5	10.6	-1.4	3.9	0.93
187	2012	ais0	171	765	1359	96.9	98.2	10.4	10.8	-1.3	3.5	0.95
188	2013	ais0	151	787	1443	98.2	99.5	11.4	11.4	-1.3	3.3	0.96
189	2014	ais0	114	1192	1453	97.5	98.2	11.5	12.0	-0.7	2.8	0.97
190	2015	ais0	83	1777	2192	100.4	101.5	11.2	11.5	-1.1	2.4	0.98
191	2016	ais0	66	1705	2169	98.9	100.5	11.2	12.0	-1.6	2.9	0.97
192	2017	ais0	66	1845	2206	98.2	99.4	13.2	13.3	-1.3	2.9	0.98
193	2018	ais0	78	1747	2529	101.1	101.6	12.0	11.6	-0.5	3.1	0.97
194	2019	ais0	56	1626	2397	102.9	101.6	13.1	12.7	1.3	3.1	0.97
195	2020	ais0	37	483	774	100.6	99.0	10.1	9.6	1.6	5.1	0.87
196	2010	ais1	193	760	2352	94.8	97.5	10.6	10.7	-2.7	3.0	0.96
197	2011	ais1	155	466	968	95.9	97.6	9.5	9.3	-1.7	3.1	0.95
198	2012	ais1	171	678	1194	97.1	98.3	10.1	10.3	-1.2	2.8	0.96
199	2013	ais1	151	701	1279	99.4	100.3	9.9	10.0	-1.0	2.7	0.96
200	2014	ais1	113	1058	1270	99.1	99.0	10.1	10.9	0.0	2.5	0.97
201	2015	ais1	83	1569	1932	104.8	104.6	9.9	10.4	0.3	2.3	0.98
202	2016	ais1	66	1496	1876	102.7	102.6	8.8	9.4	0.1	2.3	0.97
203	2017	ais1	66	1586	1876	102.9	101.6	11.8	11.8	1.2	2.4	0.98
204	2018	ais1	78	1173	1686	105.3	103.9	10.0	9.8	1.5	2.9	0.96
205	2019	ais1	31	516	812	107.0	102.9	10.6	9.2	4.1	4.1	0.92
206	2010	ais2	193	576	1796	93.9	96.5	10.5	10.3	-2.5	3.3	0.95
207	2011	ais2	155	356	759	95.1	96.7	10.4	10.2	-1.6	3.4	0.95
208	2012	ais2	171	526	930	96.2	97.6	10.9	11.0	-1.4	3.0	0.96
209	2013	ais2	151	545	1005	98.1	99.1	11.7	11.6	-1.0	2.8	0.97
210	2014	ais2	113	837	1008	99.0	99.0	10.8	11.4	0.0	2.4	0.98
211	2015	ais2	83	1253	1560	103.6	103.7	10.7	11.2	-0.1	2.6	0.97
212	2016	ais2	66	1184	1494	102.2	102.0	10.8	11.1	0.2	2.1	0.98
213	2017	ais2	66	1064	1247	103.1	101.9	12.1	12.7	1.2	2.5	0.98
214	2018	ais2	53	373	603	105.7	104.4	8.7	8.8	1.3	3.1	0.94
215	2010	ais3	193	371	1172	93.9	96.4	10.5	10.6	-2.5	3.4	0.95
216	2011	ais3	154	234	506	95.0	96.7	10.5	10.4	-1.7	3.3	0.95
217	2012	ais3	171	350	616	96.9	98.3	11.1	11.1	-1.4	3.4	0.95
218	2013	ais3	151	360	637	97.9	99.2	11.9	12.1	-1.3	3.3	0.96
219	2014	ais3	113	578	709	99.3	99.6	10.7	11.2	-0.3	2.6	0.97
220	2015	ais3	82	883	1126	103.7	104.0	11.1	12.0	-0.3	2.8	0.97
221	2016	ais3	65	693	894	103.0	103.0	11.2	11.5	-0.1	2.6	0.97
222	2017	ais3	52	207	286	103.0	102.5	12.3	12.7	0.4	3.0	0.97

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
223	2010	ais	193	978	3017	94.2	96.7	10.2	10.2	-2.6	3.0	0.96
224	2011	ais	155	598	1244	95.3	97.0	9.7	9.6	-1.7	3.0	0.95
225	2012	ais	171	867	1518	96.8	98.1	10.4	10.5	-1.3	2.8	0.96
226	2013	ais	151	891	1611	98.4	99.6	10.8	10.9	-1.2	2.7	0.97
227	2014	ais	114	1331	1605	99.2	99.3	10.0	10.6	-0.1	2.2	0.98
228	2015	ais	83	1975	2412	104.0	104.1	10.2	10.8	-0.1	2.5	0.97
229	2016	ais	66	1881	2365	102.7	102.6	9.8	10.2	0.1	2.0	0.98
230	2017	ais	66	2015	2376	102.8	101.9	11.6	11.9	1.0	2.6	0.98
231	2018	ais	78	1861	2663	105.1	103.5	9.6	9.1	1.7	3.6	0.93
232	2019	ais	56	1645	2427	105.4	101.9	9.8	8.1	3.5	5.6	0.82
233	2020	ais	37	483	774	106.3	101.9	8.3	5.8	4.4	6.8	0.59
234	2010	hst0	59	430	755	97.0	97.9	11.8	11.1	-0.9	3.5	0.96
235	2011	hst0	60	227	273	103.8	103.7	11.9	11.5	0.1	3.7	0.95
236	2012	hst0	69	288	346	99.9	100.2	11.7	10.8	-0.2	3.7	0.95
237	2013	hst0	80	260	390	99.4	99.5	11.8	11.6	-0.1	3.8	0.95
238	2014	hst0	72	237	259	102.9	103.5	12.0	11.3	-0.6	4.2	0.94
239	2015	hst0	72	305	398	98.2	98.7	11.1	10.0	-0.5	4.3	0.92
240	2016	hst0	60	288	432	102.5	103.1	10.1	10.4	-0.6	4.4	0.91
241	2017	hst0	58	325	438	101.7	102.0	11.6	11.0	-0.3	4.0	0.94
242	2018	hst0	67	271	408	103.2	103.9	9.7	9.9	-0.7	5.0	0.87
243	2019	hst0	44	246	347	100.2	101.0	12.5	10.6	-0.8	6.1	0.87
244	2020	hst0	13	92	103	100.5	98.3	8.2	9.0	2.2	3.6	0.91
245	2010	hst1	60	394	695	96.8	98.5	8.6	8.0	-1.7	2.8	0.95
246	2011	hst1	60	214	258	101.1	102.4	11.1	11.2	-1.3	3.5	0.95
247	2012	hst1	71	270	328	98.8	99.7	10.8	10.9	-0.9	3.1	0.96
248	2013	hst1	80	249	369	100.1	100.7	10.8	10.5	-0.6	3.2	0.96
249	2014	hst1	71	230	243	102.0	102.5	10.4	10.4	-0.5	3.3	0.95
250	2015	hst1	71	293	378	102.1	101.8	10.1	10.0	0.3	3.0	0.95
251	2016	hst1	61	266	396	103.3	103.5	8.7	9.0	-0.1	3.2	0.94
252	2017	hst1	56	305	392	105.0	104.3	9.2	9.4	0.7	3.6	0.93
253	2018	hst1	62	202	288	104.8	103.6	9.3	10.4	1.2	3.5	0.94
254	2019	hst1	14	95	97	102.1	102.8	8.1	8.0	-0.6	5.0	0.81
255	2010	hst2	58	295	523	96.3	97.8	10.4	9.7	-1.5	2.9	0.96
256	2011	hst2	60	157	192	100.6	101.0	10.8	10.6	-0.4	2.7	0.97
257	2012	hst2	68	211	247	98.3	99.2	11.6	11.9	-0.9	3.2	0.96
258	2013	hst2	79	190	281	100.8	100.5	11.9	11.9	0.3	3.2	0.96
259	2014	hst2	71	176	188	101.7	101.7	11.0	11.0	0.0	3.1	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
260	2015	hst2	67	236	297	102.1	101.7	10.5	11.1	0.4	3.1	0.96
261	2016	hst2	58	205	295	103.2	103.0	10.8	10.5	0.2	3.7	0.94
262	2017	hst2	52	177	206	105.2	105.3	9.7	10.4	-0.1	3.4	0.94
263	2018	hst2	24	65	102	105.4	104.4	10.1	9.7	1.0	4.5	0.89
264	2010	hst3	55	193	343	97.1	98.1	10.3	9.9	-1.0	3.8	0.93
265	2011	hst3	52	110	126	102.6	102.8	11.8	12.2	-0.2	3.7	0.95
266	2012	hst3	61	149	166	100.6	101.1	11.5	11.4	-0.5	3.0	0.97
267	2013	hst3	74	127	167	102.5	101.8	11.0	10.5	0.6	3.5	0.95
268	2014	hst3	64	125	128	102.0	102.8	11.0	10.3	-0.8	2.7	0.97
269	2015	hst3	60	166	203	101.7	101.6	11.3	11.8	0.1	2.9	0.97
270	2016	hst3	44	118	155	103.4	103.5	9.3	9.1	-0.2	3.1	0.94
271	2017	hst3	14	48	38	104.7	105.1	7.3	6.9	-0.4	2.1	0.96
272	2010	hst	60	530	924	96.9	98.4	9.6	9.0	-1.5	2.8	0.96
273	2011	hst	60	289	341	101.5	102.2	11.0	11.1	-0.7	3.0	0.96
274	2012	hst	71	358	429	99.1	99.9	11.6	11.2	-0.7	2.9	0.97
275	2013	hst	80	329	482	101.0	100.9	11.3	10.7	0.1	3.2	0.96
276	2014	hst	72	298	321	102.4	102.7	10.9	10.6	-0.3	3.0	0.96
277	2015	hst	73	371	484	101.8	101.6	10.3	10.5	0.1	2.8	0.96
278	2016	hst	62	338	507	103.6	103.5	9.8	9.3	0.1	3.0	0.95
279	2017	hst	59	376	502	104.6	104.2	9.3	9.9	0.4	3.5	0.93
280	2018	hst	68	301	450	104.6	103.6	9.5	8.9	1.0	3.7	0.92
281	2019	hst	44	250	353	102.8	101.8	7.7	5.8	0.9	5.8	0.66
282	2020	hst	13	92	103	105.1	100.7	9.0	7.7	4.4	5.3	0.81
283	2010	fert	193	807	2493	91.6	94.9	10.7	10.6	-3.3	2.7	0.97
284	2011	fert	155	494	1025	93.3	95.5	9.3	9.0	-2.2	2.5	0.96
285	2012	fert	171	718	1261	95.5	97.2	10.8	11.1	-1.7	2.6	0.97
286	2013	fert	151	741	1348	97.6	98.7	10.9	11.0	-1.1	2.7	0.97
287	2014	fert	113	1114	1336	99.5	99.6	10.3	10.7	-0.1	1.9	0.98
288	2015	fert	83	1650	2025	104.3	104.3	10.5	11.2	0.0	2.3	0.98
289	2016	fert	66	1568	1965	103.8	103.8	9.0	9.4	0.0	1.7	0.98
290	2017	fert	66	1650	1948	105.0	103.6	11.6	12.1	1.3	2.6	0.98
291	2018	fert	78	1207	1736	107.3	105.2	8.9	8.7	2.1	2.9	0.95
292	2019	fert	35	485	812	107.3	103.4	10.1	8.8	3.9	4.2	0.91
293	2010	interval	193	807	2493	92.5	95.4	10.4	10.4	-3.0	2.6	0.97
294	2011	interval	155	494	1025	94.3	96.3	9.0	8.9	-2.0	2.2	0.97
295	2012	interval	171	718	1261	96.2	97.8	11.0	11.2	-1.5	2.3	0.98
296	2013	interval	151	741	1348	98.2	99.1	11.2	11.2	-0.9	2.5	0.98

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
297	2014	interval	113	1114	1336	100.6	100.7	10.5	10.7	-0.1	1.8	0.99
298	2015	interval	83	1650	2025	104.5	104.4	10.7	11.1	0.1	2.0	0.98
299	2016	interval	66	1568	1965	104.5	104.5	9.3	9.6	0.1	1.5	0.99
300	2017	interval	66	1650	1948	105.9	104.5	10.6	11.0	1.5	2.4	0.98
301	2018	interval	78	1207	1736	107.5	105.4	8.3	8.3	2.1	2.6	0.95
302	2019	interval	35	485	812	105.4	102.2	9.3	7.5	3.2	4.4	0.88

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

Obs	diff	d_cr	d_nrr	d_icf	d_ifl	d_ais	d_hst	d_fert
1	-13	.	.	.	.	1	.	.
2	-12	.	.	.	.	1	.	.
3	-11	.	.	.	2	1	1	2
4	-10	2	5	.	1	2	1	2
5	-9	2	4	5	5	5	3	1
6	-8	8	8	4	12	12	2	14
7	-7	20	15	10	24	24	11	21
8	-6	32	25	11	30	29	9	38
9	-5	61	43	25	52	59	24	40
10	-4	78	50	37	73	63	29	74
11	-3	108	107	73	126	95	64	124
12	-2	174	136	137	138	129	79	162
13	-1	173	178	258	176	208	98	176
14	0	158	185	231	168	187	79	147
15	1	111	139	143	129	109	73	123
16	2	82	80	84	59	74	46	67
17	3	34	54	38	49	55	43	36
18	4	30	47	28	31	32	31	35
19	5	30	22	12	28	17	23	17
20	6	7	19	6	15	19	16	10
21	7	10	16	4	15	9	8	8
22	8	11	12	1	5	11	8	6
23	9	6	11	.	8	10	8	2
24	10	6	1	2	7	4	2	3
25	11	4	1	1	4	5	2	.
26	12	2	5	.	4	3	1	1
27	13	2	2	1	2	2	.	1
28	14	2	2	.	2	.	1	.
29	15	2	.	.	2	2	.	.
30	16	1	1	.	.	.	.	.
31	17	.	1	.	2	1	.	1
32	18	.	1	.	.	.	.	.
33	20	1	.	.	.	.	.	.
34	22	.	.	.	.	1	.	.
35	24	.	.	.	1	.	.	.

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

Obs	diff	p_cr	p_nrr	p_icf	p_ifl	p_ais	p_hst	p_fert
1	-13	.	.	.	.	0	.	.
2	-12	.	.	.	.	0	.	.
3	-11	.	.	.	0	0	0	0
4	-10	0	0	.	0	0	0	0
5	-9	0	0	0	0	0	0	0
6	-8	1	1	0	1	1	0	1
7	-7	2	1	1	2	2	2	2
8	-6	3	2	1	3	2	1	3
9	-5	5	4	2	4	5	4	4
10	-4	7	4	3	6	5	4	7
11	-3	9	9	7	11	8	10	11
12	-2	15	12	12	12	11	12	15
13	-1	15	15	23	15	18	15	16
14	0	14	16	21	14	16	12	13
15	1	10	12	13	11	9	11	11
16	2	7	7	8	5	6	7	6
17	3	3	5	3	4	5	6	3
18	4	3	4	3	3	3	5	3
19	5	3	2	1	2	1	3	2
20	6	1	2	1	1	2	2	1
21	7	1	1	0	1	1	1	1
22	8	1	1	0	0	1	1	1
23	9	1	1	.	1	1	1	0
24	10	1	0	0	1	0	0	0
25	11	0	0	0	0	0	0	.
26	12	0	0	.	0	0	0	0
27	13	0	0	0	0	0	.	0
28	14	0	0	.	0	.	0	.
29	15	0	.	.	0	0	.	.
30	16	0	0	.	.	.	.	.
31	17	.	0	.	0	0	.	0
32	18	.	0	.	.	.	.	.
33	20	0	.	.	.	.	.	.
34	22	.	.	.	.	0	.	.
35	24	.	.	.	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	fert	14400	100.7	100.6	9.6	8.3	0.1	4.4	0.89
2	2020	fert	18781	103.8	102.3	9.2	7.9	1.5	4.4	0.88
3	2021	fert	33635	105.1	102.4	8.5	7.1	2.8	4.5	0.85
4	2022	fert	70232	106.5	103.4	8.3	6.8	3.1	4.7	0.83
5	2023	fert	65750	106.6	103.2	8.2	6.6	3.3	4.8	0.81
6	2024	fert	2510	106.2	103.0	8.1	6.5	3.2	4.7	0.82

HOL SS and twostep breeding value for genotyped females without phenotype

Obs	diff	d_fert	p_fert
1	-20	2	0
2	-19	1	0
3	-18	4	0
4	-17	6	0
5	-16	9	0
6	-15	29	0
7	-14	42	0
8	-13	83	0
9	-12	140	0
10	-11	302	0
11	-10	509	0
12	-9	822	0
13	-8	1361	1
14	-7	2024	1
15	-6	3021	1
16	-5	4412	2
17	-4	6144	3
18	-3	8149	4
19	-2	10487	5
20	-1	12466	6
21	0	14359	7
22	1	16072	8
23	2	17006	8
24	3	17582	9
25	4	16841	8
26	5	15525	8
27	6	13814	7
28	7	11633	6
29	8	9493	5
30	9	7290	4
31	10	5540	3
32	11	3741	2
33	12	2521	1
34	13	1661	1
35	14	972	0
36	15	585	0
37	16	348	0

HOL SS and twostep breeding value for genotyped females without phenotype

Obs	diff	d_fert	p_fert
38	17	160	0
39	18	88	0
40	19	35	0
41	20	16	0
42	21	10	0
43	22	3	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	fert	10367	94.5	96.1	9.5	8.2	-1.6	4.5	0.88
2	2016	fert	15578	96.5	97.9	9.6	8.4	-1.3	4.4	0.89
3	2017	fert	22726	98.8	99.6	10.0	8.8	-0.8	4.4	0.90
4	2018	fert	31640	100.6	100.8	9.6	8.4	-0.2	4.4	0.89
5	2019	fert	34728	101.9	101.3	9.6	8.5	0.6	4.4	0.89
6	2020	fert	40177	104.7	103.0	9.1	7.9	1.7	4.4	0.88
7	2021	fert	29178	105.5	102.8	8.5	7.3	2.7	4.4	0.86
8	2022	fert	28	108.4	104.9	9.1	7.6	3.5	4.4	0.88

HOL SS and twostep breeding value for genotyped females with phenotype

Obs	diff	d_fert	p_fert
1	-26	1	0
2	-24	1	0
3	-22	1	0
4	-19	3	0
5	-18	4	0
6	-17	11	0
7	-16	22	0
8	-15	63	0
9	-14	108	0
10	-13	255	0
11	-12	427	0
12	-11	719	0
13	-10	1148	1
14	-9	1880	1
15	-8	2794	2
16	-7	4133	2
17	-6	5720	3
18	-5	7551	4
19	-4	9566	5
20	-3	12024	7
21	-2	13598	7
22	-1	15170	8
23	0	15706	9
24	1	15799	9
25	2	15167	8
26	3	14002	8
27	4	12100	7
28	5	10203	6
29	6	8192	4
30	7	6014	3
31	8	4267	2
32	9	3034	2
33	10	2010	1
34	11	1206	1
35	12	712	0
36	13	410	0
37	14	194	0

HOL SS and twostep breeding value for genotyped females with phenotype

Obs	diff	d_fert	p_fert
38	15	106	0
39	16	54	0
40	17	23	0
41	18	13	0
42	19	7	0
43	20	2	0
44	21	1	0
45	22	1	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	fert	193	807	2493	91.6	94.9	10.7	9.7	-3.3	3.3	0.95
2	2011	fert	155	494	1025	93.3	96.0	9.3	8.7	-2.7	2.8	0.96
3	2012	fert	171	718	1261	95.5	97.7	10.8	10.3	-2.2	2.7	0.97
4	2013	fert	151	741	1348	97.6	99.0	10.9	10.5	-1.4	2.3	0.98
5	2014	fert	113	1114	1336	99.5	100.1	10.3	10.1	-0.6	1.9	0.98
6	2015	fert	83	1650	2025	104.3	104.5	10.5	10.3	-0.2	2.0	0.98
7	2016	fert	66	1568	1965	103.8	104.3	9.0	9.2	-0.5	2.3	0.97
8	2017	fert	66	1650	1948	105.0	104.8	11.6	11.2	0.2	2.3	0.98
9	2018	fert	78	1207	1736	107.3	106.2	8.9	8.8	1.1	3.1	0.94
10	2019	fert	35	485	812	107.3	103.9	10.1	8.8	3.4	4.2	0.91

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

Obs	diff	d_fert	p_fert
1	.	1	.
2	-14	1	0
3	-12	1	0
4	-11	5	0
5	-10	3	0
6	-9	10	1
7	-8	18	2
8	-7	31	3
9	-6	42	4
10	-5	46	4
11	-4	70	6
12	-3	102	9
13	-2	177	16
14	-1	193	17
15	0	158	14
16	1	102	9
17	2	57	5
18	3	39	4
19	4	20	2
20	5	15	1
21	6	7	1
22	7	3	0
23	8	5	0
24	9	4	0
25	13	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	fert	22	.	.	107.5	106.3	9.2	6.8	1.2	5.5	0.81
2	2020	fert	72	.	.	108.8	106.5	7.0	5.6	2.2	4.0	0.82
3	2021	fert	58	.	.	107.7	104.6	8.3	6.4	3.1	3.8	0.90
4	2022	fert	61	.	.	110.7	107.5	7.4	5.7	3.2	4.1	0.84
5	2023	fert	34	.	.	110.5	108.2	8.3	5.9	2.3	5.5	0.76
6	2024	fert	1	.	.	101.0	.	.	.	.	.	.

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

Obs	diff	d_fert	p_fert
1	.	1	.
2	-13	1	0
3	-8	2	1
4	-7	1	0
5	-6	5	2
6	-5	5	2
7	-4	6	2
8	-3	10	4
9	-2	12	5
10	-1	17	7
11	0	20	8
12	1	21	9
13	2	17	7
14	3	18	7
15	4	19	8
16	5	24	10
17	6	21	9
18	7	18	7
19	8	16	6
20	9	7	3
21	10	3	1
22	12	2	1
23	13	1	0
24	19	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	fert	3256	105.4	103.8	8.7	7.3	1.6	4.3	0.87
2	2021	fert	3223	106.3	103.4	8.3	6.9	2.9	4.4	0.84
3	2022	fert	3253	107.7	104.6	8.0	6.8	3.1	4.6	0.82
4	2023	fert	3008	107.5	104.2	8.0	6.5	3.3	4.8	0.80
5	2024	fert	258	107.9	104.0	7.6	6.2	3.9	4.6	0.79

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

Obs	diff	d_fert	p_fert
1	-15	3	0
2	-14	1	0
3	-13	4	0
4	-12	3	0
5	-11	11	0
6	-10	18	0
7	-9	46	0
8	-8	76	1
9	-7	123	1
10	-6	169	1
11	-5	294	2
12	-4	363	3
13	-3	529	4
14	-2	657	5
15	-1	803	6
16	0	907	7
17	1	1002	8
18	2	1112	9
19	3	1225	9
20	4	1066	8
21	5	1059	8
22	6	842	6
23	7	761	6
24	8	584	4
25	9	440	3
26	10	311	2
27	11	219	2
28	12	149	1
29	13	101	1
30	14	45	0
31	15	33	0
32	16	25	0
33	17	9	0
34	18	6	0
35	19	1	0
36	21	1	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	cr0	193	930	2893	91.0	91.2	11.7	11.7	-0.1	2.2	0.98
2	2011	cr0	155	565	1191	91.3	91.5	10.7	10.7	-0.2	2.0	0.98
3	2012	cr0	171	816	1446	94.4	95.0	10.7	10.7	-0.5	2.1	0.98
4	2013	cr0	151	839	1538	96.2	97.2	12.5	12.5	-1.0	2.1	0.99
5	2014	cr0	114	1260	1534	97.6	98.7	12.7	12.5	-1.1	2.4	0.98
6	2015	cr0	83	1883	2315	101.9	103.8	12.1	11.8	-1.9	2.5	0.98
7	2016	cr0	66	1805	2289	101.4	101.8	12.1	8.0	-0.3	9.0	0.67
8	2017	cr0	66	1946	2315	102.1	105.1	14.1	10.1	-3.0	10.7	0.65
9	2018	cr0	78	1815	2612	105.4	104.5	13.2	8.7	0.9	8.8	0.75
10	2019	cr0	56	1446	2204	110.4	107.4	14.3	9.2	3.0	10.8	0.65
11	2020	cr0	24	286	372	107.0	106.3	9.8	7.3	0.8	6.1	0.78
12	2010	cr1	193	800	2470	92.1	92.3	10.5	10.4	-0.2	1.1	0.99
13	2011	cr1	155	490	1017	93.3	93.4	9.1	9.0	-0.1	1.2	0.99
14	2012	cr1	171	711	1250	96.4	96.8	9.8	9.7	-0.4	1.4	0.99
15	2013	cr1	151	735	1338	98.8	99.3	10.3	10.4	-0.5	1.5	0.99
16	2014	cr1	113	1105	1323	100.1	100.6	9.9	9.8	-0.6	1.2	0.99
17	2015	cr1	83	1634	2007	106.1	107.6	9.4	9.4	-1.5	1.5	0.99
18	2016	cr1	66	1556	1949	105.0	105.1	9.0	6.4	-0.1	6.5	0.70
19	2017	cr1	66	1636	1928	106.3	107.3	11.7	8.3	-1.0	7.4	0.78
20	2018	cr1	78	1106	1623	109.4	108.4	9.9	7.9	1.0	6.3	0.77
21	2019	cr1	24	407	641	111.7	108.2	10.3	8.1	3.5	6.4	0.78
22	2010	cr2	193	604	1882	92.1	92.2	10.1	10.1	-0.1	1.0	1.00
23	2011	cr2	155	374	795	94.0	94.0	9.4	9.4	-0.1	1.2	0.99
24	2012	cr2	171	551	972	96.8	97.1	10.3	10.3	-0.3	1.3	0.99
25	2013	cr2	151	571	1047	98.3	98.8	10.8	10.9	-0.4	1.3	0.99
26	2014	cr2	113	872	1049	100.7	101.0	10.2	10.0	-0.3	1.2	0.99
27	2015	cr2	83	1301	1617	106.1	107.2	9.5	9.5	-1.1	1.4	0.99
28	2016	cr2	66	1218	1531	105.2	105.2	9.7	7.1	0.0	6.5	0.75
29	2017	cr2	66	975	1158	107.0	107.2	11.3	8.7	-0.2	6.6	0.81
30	2018	cr2	42	287	459	110.1	109.5	7.6	6.3	0.6	6.0	0.64
31	2010	cr3	193	391	1233	91.9	92.0	10.1	10.0	-0.1	1.0	1.00
32	2011	cr3	154	247	532	94.1	94.2	9.4	9.4	0.0	1.1	0.99
33	2012	cr3	171	367	643	97.2	97.4	10.3	10.3	-0.2	1.3	0.99
34	2013	cr3	151	376	652	98.3	98.7	10.8	10.9	-0.5	1.2	0.99
35	2014	cr3	113	604	740	100.9	101.3	10.0	9.8	-0.4	1.2	0.99
36	2015	cr3	82	904	1149	106.4	107.7	9.6	9.7	-1.3	1.3	0.99
37	2016	cr3	65	623	824	105.9	105.7	9.6	7.2	0.2	6.4	0.74

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	2017	cr3	39	144	180	104.6	105.8	12.1	9.7	-1.2	6.7	0.84
39	2010	cr	193	997	3073	92.0	92.1	10.3	10.2	-0.1	1.0	1.00
40	2011	cr	155	611	1268	93.8	93.8	9.3	9.3	0.0	1.2	0.99
41	2012	cr	171	883	1546	96.8	97.1	10.2	10.1	-0.3	1.3	0.99
42	2013	cr	151	908	1638	98.4	98.9	10.7	10.8	-0.5	1.3	0.99
43	2014	cr	114	1352	1629	100.6	101.0	10.0	9.8	-0.4	1.1	0.99
44	2015	cr	83	2005	2443	106.3	107.7	9.5	9.5	-1.3	1.4	0.99
45	2016	cr	66	1909	2398	105.6	105.4	9.4	6.9	0.1	6.4	0.73
46	2017	cr	66	2043	2405	106.8	107.3	11.4	8.6	-0.5	6.8	0.81
47	2018	cr	78	1871	2669	109.8	108.9	9.2	7.8	0.9	6.1	0.76
48	2019	cr	56	1453	2215	111.8	109.6	9.9	8.0	2.3	5.7	0.82
49	2020	cr	24	286	372	113.3	112.3	7.5	7.5	1.0	4.3	0.83
50	2010	nrr0	193	892	2781	94.6	94.5	11.2	11.3	0.1	2.5	0.98
51	2011	nrr0	155	540	1143	94.4	94.2	11.2	11.1	0.2	2.3	0.98
52	2012	nrr0	171	782	1387	96.3	96.6	10.6	10.7	-0.4	2.4	0.98
53	2013	nrr0	151	804	1475	97.3	97.8	12.3	12.3	-0.4	2.6	0.98
54	2014	nrr0	114	1214	1480	96.2	97.0	12.2	12.1	-0.8	2.7	0.98
55	2015	nrr0	83	1812	2234	99.6	100.1	11.8	11.8	-0.5	2.6	0.98
56	2016	nrr0	66	1737	2208	98.1	99.3	12.2	8.1	-1.2	9.3	0.64
57	2017	nrr0	66	1877	2239	98.0	101.5	13.4	9.6	-3.5	10.5	0.63
58	2018	nrr0	78	1769	2558	100.8	100.9	12.7	8.3	-0.1	9.2	0.69
59	2019	nrr0	56	1632	2406	104.2	103.1	14.0	8.9	1.0	10.5	0.66
60	2020	nrr0	37	483	773	100.7	102.4	10.9	8.1	-1.7	6.4	0.81
61	2010	nrr1	193	766	2371	95.4	95.4	9.8	9.9	0.0	1.5	0.99
62	2011	nrr1	155	470	976	96.0	95.9	9.1	9.0	0.1	1.5	0.99
63	2012	nrr1	171	684	1204	97.8	97.9	9.5	9.4	-0.1	1.6	0.99
64	2013	nrr1	151	706	1288	99.8	99.8	9.7	9.8	0.1	1.9	0.98
65	2014	nrr1	113	1064	1276	99.2	99.4	9.1	9.0	-0.3	1.6	0.98
66	2015	nrr1	83	1578	1941	104.3	104.5	9.4	9.1	-0.2	1.7	0.98
67	2016	nrr1	66	1504	1886	102.9	103.6	8.9	6.7	-0.6	6.8	0.65
68	2017	nrr1	66	1593	1884	103.5	103.5	10.6	7.8	0.1	7.1	0.74
69	2018	nrr1	78	1189	1706	105.3	104.7	9.6	7.8	0.6	7.0	0.70
70	2019	nrr1	35	510	831	109.1	106.5	10.6	7.6	2.7	6.9	0.76
71	2010	nrr2	193	580	1809	93.4	93.4	9.7	9.6	0.0	1.4	0.99
72	2011	nrr2	155	359	764	95.2	95.1	9.6	9.4	0.1	1.4	0.99
73	2012	nrr2	171	530	936	96.2	96.2	10.2	10.2	0.0	1.6	0.99
74	2013	nrr2	151	549	1010	97.3	97.5	11.1	11.0	-0.2	1.7	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
75	2014	nrr2	113	841	1015	98.5	98.6	9.2	9.1	-0.1	1.8	0.98
76	2015	nrr2	83	1259	1569	102.8	102.8	9.7	9.7	-0.1	1.6	0.99
77	2016	nrr2	66	1189	1500	101.4	102.2	11.3	7.8	-0.8	8.2	0.69
78	2017	nrr2	66	1082	1268	103.2	102.9	11.4	8.6	0.3	7.1	0.78
79	2018	nrr2	56	402	637	106.3	106.2	9.0	6.7	0.1	7.3	0.60
80	2010	nrr3	193	374	1179	94.0	94.0	10.0	9.8	0.0	1.3	0.99
81	2011	nrr3	154	236	509	95.9	96.0	10.1	10.1	-0.1	1.6	0.99
82	2012	nrr3	171	352	620	97.3	97.3	11.1	11.1	0.0	1.6	0.99
83	2013	nrr3	151	363	643	97.6	97.7	11.8	11.8	-0.1	1.6	0.99
84	2014	nrr3	113	581	712	99.2	99.1	10.2	9.9	0.1	1.9	0.98
85	2015	nrr3	82	887	1132	103.5	103.8	11.2	11.4	-0.3	1.6	0.99
86	2016	nrr3	65	706	907	103.4	103.0	12.0	8.8	0.5	8.2	0.73
87	2017	nrr3	56	224	311	103.7	102.3	11.4	9.1	1.3	7.6	0.75
88	2010	nrr	193	984	3034	94.3	94.2	9.4	9.4	0.1	1.2	0.99
89	2011	nrr	155	602	1250	95.7	95.7	9.1	9.1	0.0	1.4	0.99
90	2012	nrr	171	871	1525	97.2	97.1	10.0	9.9	0.0	1.4	0.99
91	2013	nrr	151	896	1619	98.2	98.3	10.6	10.5	-0.1	1.6	0.99
92	2014	nrr	114	1336	1612	99.1	99.1	9.1	8.9	0.0	1.5	0.99
93	2015	nrr	83	1983	2421	103.5	103.8	9.7	9.6	-0.3	1.5	0.99
94	2016	nrr	66	1889	2375	102.7	102.9	10.4	7.5	-0.2	7.3	0.71
95	2017	nrr	66	2024	2385	103.3	102.8	10.8	8.1	0.5	6.9	0.77
96	2018	nrr	78	1870	2676	105.6	105.3	9.4	7.7	0.4	6.2	0.75
97	2019	nrr	56	1650	2436	107.4	105.3	9.7	7.6	2.1	5.0	0.86
98	2020	nrr	37	483	773	106.3	106.2	8.2	8.1	0.0	4.7	0.83
99	2010	icf1	193	776	2400	97.7	97.9	9.6	9.6	-0.2	1.0	0.99
100	2011	icf1	155	475	986	99.1	99.1	9.1	9.1	0.0	0.9	0.99
101	2012	icf1	171	691	1215	99.3	99.4	9.9	10.0	-0.1	1.0	1.00
102	2013	icf1	151	714	1302	100.8	101.0	9.8	10.0	-0.2	1.2	0.99
103	2014	icf1	113	1075	1289	102.5	102.5	9.3	9.6	0.0	1.2	0.99
104	2015	icf1	83	1595	1962	103.8	103.9	8.4	8.4	0.0	1.2	0.99
105	2016	icf1	66	1520	1906	104.0	101.7	8.9	8.4	2.3	4.9	0.84
106	2017	icf1	66	1611	1904	104.9	105.6	7.8	7.7	-0.7	4.8	0.81
107	2018	icf1	78	1197	1719	105.4	104.4	7.6	7.3	0.9	5.1	0.77
108	2019	icf1	35	485	812	101.5	101.5	8.1	6.7	0.0	3.4	0.91
109	2010	icf2	193	588	1833	97.4	97.5	9.6	9.5	-0.1	1.0	0.99
110	2011	icf2	155	363	774	98.5	98.6	9.1	9.1	0.0	0.8	1.00
111	2012	icf2	171	537	948	99.4	99.5	10.3	10.4	-0.1	0.9	1.00

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	2013	icf2	151	556	1024	100.6	100.6	10.9	10.9	0.0	1.1	1.00
113	2014	icf2	113	851	1025	102.7	102.6	10.1	10.2	0.1	1.1	0.99
114	2015	icf2	83	1274	1585	104.3	104.3	9.9	9.8	-0.1	1.2	0.99
115	2016	icf2	66	1203	1516	104.5	102.3	9.9	9.0	2.2	4.9	0.87
116	2017	icf2	66	1089	1274	105.6	105.7	9.3	9.0	-0.1	5.3	0.83
117	2018	icf2	53	392	628	105.8	104.5	8.3	7.8	1.2	5.2	0.79
118	2010	icf3	193	381	1202	97.5	97.5	9.9	9.9	0.0	0.9	1.00
119	2011	icf3	154	240	518	98.7	98.7	9.8	9.7	0.1	0.9	1.00
120	2012	icf3	171	358	632	99.9	100.1	10.9	10.9	-0.2	0.9	1.00
121	2013	icf3	151	369	654	100.8	100.8	11.8	11.9	0.0	1.1	1.00
122	2014	icf3	113	590	723	103.3	103.3	11.0	11.2	0.0	1.2	0.99
123	2015	icf3	82	903	1150	104.7	104.7	10.5	10.5	0.0	1.1	0.99
124	2016	icf3	65	715	920	105.5	103.5	10.8	8.9	2.1	5.4	0.86
125	2017	icf3	54	213	299	106.3	106.6	10.0	9.8	-0.3	4.8	0.88
126	2010	icf	193	807	2493	97.5	97.6	9.7	9.6	-0.1	0.9	1.00
127	2011	icf	155	494	1025	98.9	98.7	9.2	9.3	0.1	0.8	1.00
128	2012	icf	171	718	1261	99.6	99.7	10.4	10.4	-0.1	0.8	1.00
129	2013	icf	151	741	1348	100.8	100.8	10.9	11.0	0.0	1.0	1.00
130	2014	icf	113	1114	1336	102.9	102.9	10.2	10.4	0.0	1.1	0.99
131	2015	icf	83	1650	2025	104.5	104.5	9.7	9.7	0.0	1.1	0.99
132	2016	icf	66	1568	1965	104.8	102.6	9.9	8.7	2.1	5.0	0.87
133	2017	icf	66	1650	1948	105.8	106.2	8.8	8.8	-0.3	4.8	0.85
134	2018	icf	78	1207	1736	106.1	105.3	8.2	7.8	0.7	4.7	0.83
135	2019	icf	35	485	812	101.9	101.7	8.5	7.6	0.2	3.2	0.93
136	2010	ifl0	193	865	2703	95.0	95.0	11.1	11.2	-0.1	2.5	0.98
137	2011	ifl0	155	523	1109	95.0	94.9	10.0	9.9	0.1	2.2	0.98
138	2012	ifl0	171	760	1348	97.0	97.6	10.4	10.4	-0.6	2.4	0.97
139	2013	ifl0	151	780	1431	97.9	98.6	11.2	11.4	-0.7	2.6	0.97
140	2014	ifl0	114	1182	1442	98.0	98.8	11.6	11.5	-0.8	3.0	0.97
141	2015	ifl0	83	1762	2175	100.8	101.8	11.0	11.2	-1.0	2.7	0.97
142	2016	ifl0	66	1695	2154	100.1	100.8	11.5	7.9	-0.7	9.2	0.61
143	2017	ifl0	66	1834	2191	100.0	104.2	13.0	9.4	-4.2	10.5	0.60
144	2018	ifl0	78	1732	2505	102.9	103.2	11.9	7.5	-0.2	8.9	0.67
145	2019	ifl0	56	1604	2364	105.3	105.2	13.4	9.0	0.1	11.1	0.57
146	2020	ifl0	37	479	767	102.5	104.2	9.9	7.5	-1.7	6.5	0.75
147	2010	ifl1	193	772	2387	93.5	93.6	11.1	11.0	-0.2	1.2	0.99
148	2011	ifl1	155	472	980	94.8	94.8	9.1	9.1	0.1	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
149	2012	ifl1	171	687	1208	97.1	97.4	10.5	10.4	-0.2	1.4	0.99
150	2013	ifl1	151	710	1296	100.0	100.4	10.3	10.5	-0.4	1.4	0.99
151	2014	ifl1	113	1069	1282	100.9	101.3	10.2	10.2	-0.4	1.4	0.99
152	2015	ifl1	83	1588	1955	106.2	107.1	10.1	10.1	-0.9	1.6	0.99
153	2016	ifl1	66	1513	1897	105.7	104.8	8.6	7.5	0.9	6.0	0.73
154	2017	ifl1	66	1603	1897	106.8	108.0	11.4	8.8	-1.3	6.8	0.80
155	2018	ifl1	78	1200	1721	109.4	108.6	9.0	8.2	0.9	6.0	0.76
156	2019	ifl1	35	517	841	109.7	108.2	10.4	8.1	1.5	5.8	0.83
157	2010	ifl2	193	585	1822	92.8	92.9	11.0	10.9	-0.1	1.1	0.99
158	2011	ifl2	155	361	768	94.7	94.7	9.8	9.8	-0.1	1.2	0.99
159	2012	ifl2	171	533	941	96.8	97.1	11.4	11.4	-0.3	1.4	0.99
160	2013	ifl2	151	553	1019	99.1	99.6	11.6	11.6	-0.4	1.4	0.99
161	2014	ifl2	113	847	1020	101.2	101.4	10.8	10.7	-0.2	1.3	0.99
162	2015	ifl2	83	1267	1579	106.2	107.1	11.2	11.4	-0.8	1.6	0.99
163	2016	ifl2	66	1198	1509	105.7	104.8	10.0	8.5	0.9	6.4	0.77
164	2017	ifl2	66	1094	1282	107.6	107.9	12.1	9.4	-0.3	6.7	0.83
165	2018	ifl2	56	409	647	110.8	110.0	8.4	7.7	0.8	6.0	0.73
166	2010	ifl3	193	378	1194	92.3	92.4	11.1	11.1	-0.2	1.1	1.00
167	2011	ifl3	154	239	514	94.6	94.6	10.1	10.2	0.0	1.3	0.99
168	2012	ifl3	171	356	628	97.4	97.5	11.9	11.9	-0.2	1.3	0.99
169	2013	ifl3	151	368	653	99.0	99.4	12.2	12.3	-0.4	1.4	0.99
170	2014	ifl3	113	587	719	102.1	102.2	11.3	11.3	-0.1	1.4	0.99
171	2015	ifl3	82	898	1145	106.8	107.9	12.1	12.6	-1.1	1.6	0.99
172	2016	ifl3	65	717	921	107.2	105.7	10.1	8.8	1.5	6.3	0.79
173	2017	ifl3	56	229	318	108.8	108.6	12.7	10.7	0.2	6.8	0.85
174	2010	ifl	193	978	3016	92.9	93.0	10.8	10.8	-0.1	1.0	1.00
175	2011	ifl	155	598	1243	94.7	94.7	9.4	9.5	0.0	1.1	0.99
176	2012	ifl	171	866	1517	97.1	97.3	11.1	11.0	-0.2	1.2	0.99
177	2013	ifl	151	890	1609	99.3	99.7	11.2	11.3	-0.4	1.3	0.99
178	2014	ifl	114	1329	1603	101.4	101.6	10.5	10.5	-0.2	1.2	0.99
179	2015	ifl	83	1972	2408	106.4	107.4	10.9	11.1	-1.0	1.4	0.99
180	2016	ifl	66	1878	2360	106.3	105.2	9.3	8.0	1.1	5.9	0.77
181	2017	ifl	66	2012	2371	107.7	108.1	11.7	9.3	-0.4	6.5	0.83
182	2018	ifl	78	1850	2646	109.9	109.3	8.7	8.2	0.7	5.2	0.81
183	2019	ifl	56	1625	2398	109.9	108.7	10.2	8.4	1.2	4.9	0.88
184	2020	ifl	37	479	767	112.0	111.6	7.5	7.6	0.4	3.8	0.87
185	2010	ais0	193	872	2720	95.5	95.4	10.9	11.1	0.1	2.5	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
186	2011	ais0	155	527	1119	95.3	95.2	10.4	10.4	0.1	2.4	0.97
187	2012	ais0	171	765	1359	96.7	96.9	10.4	10.4	-0.2	2.4	0.97
188	2013	ais0	151	787	1443	97.9	98.3	11.3	11.3	-0.3	2.3	0.98
189	2014	ais0	114	1192	1453	97.2	97.5	11.5	11.5	-0.3	2.5	0.98
190	2015	ais0	83	1777	2192	100.1	100.4	11.1	11.2	-0.2	2.5	0.97
191	2016	ais0	66	1705	2169	98.7	99.6	11.1	7.6	-1.0	8.2	0.67
192	2017	ais0	66	1845	2206	97.9	101.5	13.2	9.2	-3.6	10.4	0.62
193	2018	ais0	78	1747	2529	100.8	100.8	12.0	8.5	-0.1	8.6	0.70
194	2019	ais0	56	1626	2397	102.7	102.9	13.1	8.7	-0.2	9.7	0.67
195	2020	ais0	37	483	774	100.3	102.4	10.1	8.2	-2.1	6.3	0.78
196	2010	ais1	193	760	2352	96.0	96.2	10.7	10.8	-0.2	1.4	0.99
197	2011	ais1	155	466	968	97.2	97.0	9.6	9.5	0.2	1.4	0.99
198	2012	ais1	171	678	1194	98.3	98.3	10.1	10.1	0.0	1.6	0.99
199	2013	ais1	151	701	1279	100.6	100.8	10.1	10.1	-0.1	1.7	0.99
200	2014	ais1	113	1058	1270	100.4	100.4	10.2	10.2	0.0	1.5	0.99
201	2015	ais1	83	1569	1932	106.1	106.1	10.0	9.8	0.0	1.5	0.99
202	2016	ais1	66	1496	1876	104.0	103.8	9.0	7.1	0.2	6.5	0.70
203	2017	ais1	66	1586	1876	104.1	104.9	12.0	8.8	-0.8	7.2	0.80
204	2018	ais1	78	1173	1686	106.7	105.5	10.2	8.2	1.2	6.7	0.75
205	2019	ais1	31	516	812	108.4	107.0	10.7	8.8	1.4	5.9	0.84
206	2010	ais2	193	576	1796	95.0	95.0	10.6	10.6	0.0	1.3	0.99
207	2011	ais2	155	356	759	96.3	96.1	10.6	10.5	0.1	1.4	0.99
208	2012	ais2	171	526	930	97.4	97.4	11.0	11.0	0.0	1.5	0.99
209	2013	ais2	151	545	1005	99.3	99.4	11.8	11.8	-0.2	1.6	0.99
210	2014	ais2	113	837	1008	100.2	100.1	11.0	10.7	0.1	1.5	0.99
211	2015	ais2	83	1253	1560	104.9	105.1	10.7	10.8	-0.2	1.5	0.99
212	2016	ais2	66	1184	1494	103.4	103.2	11.0	8.8	0.2	7.6	0.73
213	2017	ais2	66	1064	1247	104.3	104.3	12.3	9.3	0.0	6.9	0.83
214	2018	ais2	53	373	603	106.9	106.0	8.7	7.1	0.9	6.6	0.67
215	2010	ais3	193	371	1172	95.1	95.2	10.9	10.9	0.0	1.3	0.99
216	2011	ais3	154	234	506	96.3	96.3	10.8	10.7	0.0	1.4	0.99
217	2012	ais3	171	350	616	98.3	98.3	11.5	11.5	0.0	1.4	0.99
218	2013	ais3	151	360	637	99.3	99.5	12.3	12.5	-0.2	1.5	0.99
219	2014	ais3	113	578	709	100.8	100.5	11.0	10.8	0.4	1.5	0.99
220	2015	ais3	82	883	1126	105.2	105.7	11.4	11.8	-0.5	1.4	0.99
221	2016	ais3	65	693	894	104.6	103.9	11.5	9.4	0.6	7.4	0.77
222	2017	ais3	52	207	286	104.6	104.0	12.7	10.6	0.6	6.9	0.84

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
223	2010	ais	193	978	3017	95.4	95.5	10.4	10.4	-0.1	1.2	0.99
224	2011	ais	155	598	1244	96.6	96.5	9.9	9.9	0.0	1.2	0.99
225	2012	ais	171	867	1518	98.1	98.0	10.6	10.5	0.1	1.3	0.99
226	2013	ais	151	891	1611	99.7	99.9	11.0	11.2	-0.2	1.4	0.99
227	2014	ais	114	1331	1605	100.5	100.3	10.2	10.0	0.2	1.4	0.99
228	2015	ais	83	1975	2412	105.4	105.7	10.3	10.5	-0.3	1.3	0.99
229	2016	ais	66	1881	2365	104.0	103.6	10.0	8.1	0.4	6.7	0.75
230	2017	ais	66	2015	2376	104.2	104.3	11.7	9.2	-0.1	6.5	0.83
231	2018	ais	78	1861	2663	106.5	105.8	9.8	8.0	0.8	5.9	0.80
232	2019	ais	56	1645	2427	106.9	105.6	10.0	8.2	1.3	5.1	0.86
233	2020	ais	37	483	774	107.8	107.1	8.5	8.7	0.6	4.7	0.85
234	2010	hst0	59	430	755	96.7	97.1	11.5	11.0	-0.5	3.2	0.96
235	2011	hst0	60	227	273	103.5	103.2	11.7	11.5	0.3	2.7	0.97
236	2012	hst0	69	288	346	99.5	100.0	11.5	11.0	-0.5	2.8	0.97
237	2013	hst0	80	260	390	99.1	100.7	11.7	11.8	-1.7	3.3	0.96
238	2014	hst0	72	237	259	102.5	103.7	11.8	11.6	-1.2	4.1	0.94
239	2015	hst0	72	305	398	97.9	99.6	10.9	9.9	-1.7	4.1	0.93
240	2016	hst0	60	288	432	102.1	101.3	10.0	9.3	0.9	8.8	0.58
241	2017	hst0	58	325	438	101.4	102.4	11.4	8.8	-1.0	8.0	0.72
242	2018	hst0	67	271	408	102.7	101.4	9.5	7.5	1.3	7.4	0.65
243	2019	hst0	44	246	347	99.9	101.0	12.2	7.0	-1.0	9.2	0.66
244	2020	hst0	13	92	103	100.1	102.3	7.9	6.4	-2.2	6.1	0.66
245	2010	hst1	60	394	695	97.5	97.9	8.7	8.6	-0.4	1.9	0.98
246	2011	hst1	60	214	258	101.9	102.1	11.2	11.4	-0.2	1.7	0.99
247	2012	hst1	71	270	328	99.6	99.7	10.9	10.8	-0.1	2.0	0.98
248	2013	hst1	80	249	369	100.9	101.3	11.0	11.1	-0.4	2.5	0.97
249	2014	hst1	71	230	243	102.9	103.3	10.5	10.5	-0.4	2.7	0.97
250	2015	hst1	71	293	378	102.9	102.7	10.2	10.3	0.2	3.5	0.94
251	2016	hst1	61	266	396	104.1	103.4	8.9	8.2	0.7	7.5	0.61
252	2017	hst1	56	305	392	105.9	104.7	9.3	7.8	1.1	6.0	0.77
253	2018	hst1	62	202	288	105.7	104.3	9.4	7.3	1.4	8.0	0.57
254	2019	hst1	14	95	97	103.1	102.4	8.1	5.3	0.7	6.3	0.63
255	2010	hst2	58	295	523	96.8	97.2	10.4	10.4	-0.4	1.4	0.99
256	2011	hst2	60	157	192	101.1	101.0	10.8	10.9	0.0	1.7	0.99
257	2012	hst2	68	211	247	98.8	98.9	11.7	11.6	-0.1	1.7	0.99
258	2013	hst2	79	190	281	101.4	101.8	11.9	12.2	-0.5	2.0	0.99
259	2014	hst2	71	176	188	102.1	102.7	11.0	11.4	-0.7	2.2	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
260	2015	hst2	67	236	297	102.5	103.0	10.4	10.6	-0.5	2.5	0.97
261	2016	hst2	58	205	295	103.7	102.6	11.0	9.4	1.1	7.1	0.77
262	2017	hst2	52	177	206	105.8	103.3	9.7	8.7	2.5	6.3	0.77
263	2018	hst2	24	65	102	105.8	104.3	10.1	9.0	1.5	8.1	0.65
264	2010	hst3	55	193	343	97.8	98.1	10.5	10.0	-0.3	1.5	0.99
265	2011	hst3	52	110	126	103.2	103.2	12.1	12.3	0.1	1.6	0.99
266	2012	hst3	61	149	166	101.0	101.2	11.8	11.4	-0.1	1.4	0.99
267	2013	hst3	74	127	167	103.0	103.5	11.1	11.2	-0.5	1.7	0.99
268	2014	hst3	64	125	128	102.6	103.3	11.1	11.3	-0.6	2.0	0.99
269	2015	hst3	60	166	203	102.3	103.0	11.7	11.4	-0.7	1.9	0.99
270	2016	hst3	44	118	155	104.0	103.4	9.5	7.5	0.5	6.7	0.72
271	2017	hst3	14	48	38	105.5	103.6	7.3	7.7	1.9	4.9	0.79
272	2010	hst	60	530	924	97.5	97.9	9.8	9.5	-0.4	1.4	0.99
273	2011	hst	60	289	341	102.2	102.2	11.1	11.3	0.0	1.5	0.99
274	2012	hst	71	358	429	99.8	99.9	11.6	11.4	-0.1	1.5	0.99
275	2013	hst	80	329	482	101.6	102.1	11.5	11.5	-0.5	1.7	0.99
276	2014	hst	72	298	321	103.1	103.8	11.0	11.2	-0.7	1.8	0.99
277	2015	hst	73	371	484	102.4	102.8	10.5	10.4	-0.4	2.2	0.98
278	2016	hst	62	338	507	104.1	103.2	9.7	8.4	0.9	6.2	0.78
279	2017	hst	59	376	502	105.3	103.9	9.3	8.2	1.4	5.5	0.81
280	2018	hst	68	301	450	105.3	104.2	9.5	7.6	1.1	6.1	0.77
281	2019	hst	44	250	353	103.3	102.7	7.8	7.2	0.7	4.1	0.85
282	2020	hst	13	92	103	106.0	105.0	9.1	6.4	1.0	4.9	0.86
283	2010	fert	193	807	2493	93.2	93.3	11.0	11.0	-0.1	1.0	1.00
284	2011	fert	155	494	1025	94.9	94.9	9.5	9.5	0.0	1.2	0.99
285	2012	fert	171	718	1261	97.2	97.5	11.1	11.0	-0.3	1.3	0.99
286	2013	fert	151	741	1348	99.3	99.7	11.2	11.4	-0.4	1.3	0.99
287	2014	fert	113	1114	1336	101.2	101.4	10.5	10.5	-0.1	1.2	0.99
288	2015	fert	83	1650	2025	106.1	107.1	10.8	11.1	-0.9	1.4	0.99
289	2016	fert	66	1568	1965	105.7	104.6	9.2	8.0	1.1	6.0	0.77
290	2017	fert	66	1650	1948	106.8	107.7	11.8	9.5	-0.9	6.8	0.82
291	2018	fert	78	1207	1736	109.2	108.6	9.0	8.1	0.6	5.4	0.81
292	2019	fert	35	485	812	109.2	107.9	10.5	8.4	1.3	5.2	0.87
293	2010	interval	193	807	2493	94.0	94.1	10.8	10.7	-0.2	1.0	1.00
294	2011	interval	155	494	1025	95.8	95.9	9.3	9.4	0.0	0.9	0.99
295	2012	interval	171	718	1261	97.9	98.1	11.3	11.3	-0.2	1.0	1.00
296	2013	interval	151	741	1348	99.9	100.2	11.5	11.6	-0.3	1.1	1.00

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
297	2014	interval	113	1114	1336	102.4	102.5	10.8	10.8	-0.1	0.9	1.00
298	2015	interval	83	1650	2025	106.5	107.1	10.9	11.2	-0.7	1.3	0.99
299	2016	interval	66	1568	1965	106.5	104.7	9.6	8.8	1.8	5.1	0.85
300	2017	interval	66	1650	1948	107.9	108.4	10.9	9.6	-0.5	5.7	0.86
301	2018	interval	78	1207	1736	109.5	108.7	8.5	8.3	0.8	4.9	0.83
302	2019	interval	35	485	812	107.4	106.2	9.7	8.1	1.1	4.1	0.91

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

Obs	diff	d_cr0	d_cr	d_nrr0	d_nrr	d_icf	d_ifl0	d_ifl	d_ais0	d_ais	d_hst	d_fert	d_interval
1	-34	.	.	.	.	.	1	.	.	.	.	.	.
2	-32	1	.	.	.	.	.	.	.	.	.	.	.
3	-31	.	.	1	.	.	.	.	.	.	.	.	.
4	-30	.	.	.	.	.	.	.	2	.	.	.	.
5	-29	.	.	1	.	.	.	.	.	.	.	.	.
6	-28	1	.	.	.	.	1	.	.	.	.	.	.
7	-27	1	.	1	.	.	.	.	1	.	.	.	.
8	-26	1	.	1	.	.	.	.	.	.	.	.	.
9	-25	1	.	1	.	.	4	.	1	.	.	.	.
10	-24	.	.	1	.	.	1	.	1	.	.	.	.
11	-23	.	.	1	.	.	.	.	.	.	.	.	.
12	-22	1	.	1	.	.	2	.	2	.	.	.	.
13	-21	3	.	4	2	.	1	.	1	1	.	.	1
14	-20	2	.	2	1	.	3	.	1	.	.	.	.
15	-19	.	.	1	.	.	.	1	2	.	.	2	.
16	-18	.	1	1	.	.	3	1	2	.	.	.	.
17	-17	2	.	3	.	1	1	.	3	2	.	.	.
18	-16	1	2	.	.	.	3	.	2	.	.	.	.
19	-15	4	.	2	1	.	9	1	3	.	1	1	.
20	-14	4	1	4	.	.	5	.	9	1	1	.	.
21	-13	5	1	5	2	.	2	.	6	3	2	3	.
22	-12	2	3	7	3	.	6	2	4	3	1	2	.
23	-11	4	5	5	3	2	7	4	3	2	3	3	1
24	-10	6	3	6	8	3	13	4	4	6	.	4	4
25	-9	7	11	12	7	2	7	5	8	5	3	2	5
26	-8	9	1	13	5	3	7	4	10	7	2	6	2
27	-7	11	7	10	8	4	5	5	10	8	3	10	6
28	-6	20	10	14	11	8	15	13	19	11	10	7	6
29	-5	17	11	14	17	8	13	17	19	8	11	11	20
30	-4	19	14	16	11	11	21	21	14	7	14	13	9
31	-3	25	26	22	16	16	32	16	17	17	14	15	17
32	-2	21	50	26	21	19	19	31	23	25	32	30	25
33	-1	18	38	22	43	39	24	47	19	45	35	45	47
34	0	33	26	30	35	52	24	33	36	48	31	30	28
35	1	17	24	16	32	48	17	36	28	37	37	23	30
36	2	16	27	25	31	25	17	17	27	37	19	20	24
37	3	13	17	17	26	22	26	34	17	24	24	18	30

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

Obs	diff	d_cr0	d_cr	d_nrr0	d_nrr	d_icf	d_ifl0	d_ifl	d_ais0	d_ais	d_hst	d_fert	d_interval
38	4	15	15	17	17	11	15	24	11	14	13	23	22
39	5	15	17	8	25	17	11	27	10	16	15	18	12
40	6	10	15	12	18	8	11	9	7	13	10	13	12
41	7	8	11	7	9	12	5	10	12	17	8	6	8
42	8	10	10	7	7	9	9	9	12	6	13	10	7
43	9	6	5	13	9	2	5	5	4	8	2	3	4
44	10	7	8	5	6	3	8	2	11	6	3	1	2
45	11	5	5	5	2	3	5	2	8	1	5	1	4
46	12	5	3	5	1	.	6	3	1	3	.	4	.
47	13	5	2	5	4	.	3	.	5	1	1	1	1
48	14	4	2	4	4	.	7	1	3	1	1	2	.
49	15	3	1	2	1	.	4	1	3	2	2	.	.
50	16	4	.	3	.	.	1	.	.	1	2	.	.
51	17	.	.	1	.	.	1	1	3	.	.	1	1
52	18	2	.	2	.	.	2	.	.	.	.	.	.
53	19	.	1	1	.	.	2	.	1	.	1	.	.
54	20	3	.	1	.	.	2	.	.	.	.	.	.
55	22	1	.	1	.	.	.	.	.	.	.	.	.
56	23	1	.	1	.	.	.	.	1	.	.	.	.
57	24	1	.	1	.	.	.	.	.	.	.	.	.
58	25	1	.	.	.	.	.	.	.	.	.	.	.
59	26	2	.	.	.	.	.	.	.	.	.	.	.

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

Obs	diff	p_cr0	p_cr	p_nrr0	p_nrr	p_icf	p_ifl0	p_ifl	p_ais0	p_ais	p_hst	p_fert	p_interval
1	-34	.	.	.	.	.	0	.	.	.	.	.	.
2	-32	0	.	.	.	.	.	.	.	.	.	.	.
3	-31	.	.	0	.	.	.	.	.	.	.	.	.
4	-30	.	.	.	.	.	.	.	1	.	.	.	.
5	-29	.	.	0	.	.	.	.	.	.	.	.	.
6	-28	0	.	.	.	.	0	.	.	.	.	.	.
7	-27	0	.	0	.	.	.	.	0	.	.	.	.
8	-26	0	.	0	.	.	.	.	.	.	.	.	.
9	-25	0	.	0	.	.	1	.	0	.	.	.	.
10	-24	.	.	0	.	.	0	.	0	.	.	.	.
11	-23	.	.	0	.	.	.	.	.	.	.	.	.
12	-22	0	.	0	.	.	1	.	1	.	.	.	.
13	-21	1	.	1	1	.	0	.	0	0	.	.	0
14	-20	1	.	1	0	.	1	.	0	.	.	.	.
15	-19	.	.	0	.	.	.	0	1	.	.	1	.
16	-18	.	0	0	.	.	1	0	1	.	.	.	.
17	-17	1	.	1	.	0	0	.	1	1	.	.	.
18	-16	0	1	.	.	.	1	.	1	.	.	.	.
19	-15	1	.	1	0	.	2	0	1	.	0	0	.
20	-14	1	0	1	.	.	1	.	2	0	0	.	.
21	-13	1	0	1	1	.	1	.	2	1	1	1	.
22	-12	1	1	2	1	.	2	1	1	1	0	1	.
23	-11	1	1	1	1	1	2	1	1	1	1	1	0
24	-10	2	1	2	2	1	3	1	1	2	.	1	1
25	-9	2	3	3	2	1	2	1	2	1	1	1	2
26	-8	2	0	3	1	1	2	1	3	2	1	2	1
27	-7	3	2	3	2	1	1	1	3	2	1	3	2
28	-6	5	3	4	3	2	4	3	5	3	3	2	2
29	-5	5	3	4	4	2	3	4	5	2	3	3	6
30	-4	5	4	4	3	3	5	5	4	2	4	4	3
31	-3	7	7	6	4	5	8	4	4	4	4	5	5
32	-2	6	13	7	5	6	5	8	6	6	10	9	8
33	-1	5	10	6	11	12	6	12	5	12	11	14	14
34	0	9	7	8	9	16	6	9	9	12	10	9	9
35	1	5	6	4	8	15	4	9	7	10	12	7	9
36	2	4	7	6	8	8	4	4	7	10	6	6	7
37	3	3	5	4	7	7	7	9	4	6	8	5	9

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

Obs	diff	p_cr0	p_cr	p_nrr0	p_nrr	p_icf	p_ifl0	p_ifl	p_ais0	p_ais	p_hst	p_fert	p_interval
38	4	4	4	4	4	3	4	6	3	4	4	7	7
39	5	4	5	2	6	5	3	7	3	4	5	5	4
40	6	3	4	3	5	2	3	2	2	3	3	4	4
41	7	2	3	2	2	4	1	3	3	4	3	2	2
42	8	3	3	2	2	3	2	2	3	2	4	3	2
43	9	2	1	3	2	1	1	1	1	2	1	1	1
44	10	2	2	1	2	1	2	1	3	2	1	0	1
45	11	1	1	1	1	1	1	1	2	0	2	0	1
46	12	1	1	1	0	.	2	1	0	1	.	1	.
47	13	1	1	1	1	.	1	.	1	0	0	0	0
48	14	1	1	1	1	.	2	0	1	0	0	1	.
49	15	1	0	1	0	.	1	0	1	1	1	.	.
50	16	1	.	1	.	.	0	.	.	0	1	.	.
51	17	.	.	0	.	.	0	0	1	.	.	0	0
52	18	1	.	1	.	.	1	.	.	.	.	.	.
53	19	.	0	0	.	.	1	.	0	.	0	.	.
54	20	1	.	0	.	.	1	.	.	.	.	.	.
55	22	0	.	0	.	.	.	.	.	.	.	.	.
56	23	0	.	0	.	.	.	.	0	.	.	.	.
57	24	0	.	0	.	.	.	.	.	.	.	.	.
58	25	0	.	.	.	.	.	.	.	.	.	.	.
59	26	1	.	.	.	.	.	.	.	.	.	.	.

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	cr0	193	930	2893	92.9	93.0	11.5	11.6	-0.1	1.0	1.00
2	2011	cr0	155	565	1191	92.5	92.6	10.2	10.2	0.0	1.2	0.99
3	2012	cr0	171	816	1446	95.2	95.5	10.7	10.4	-0.4	1.6	0.99
4	2013	cr0	151	839	1538	96.6	97.0	12.2	12.2	-0.4	1.9	0.99
5	2014	cr0	114	1260	1534	97.4	98.1	13.0	12.8	-0.7	2.1	0.99
6	2015	cr0	83	1883	2315	101.9	103.4	12.6	12.5	-1.5	2.4	0.98
7	2016	cr0	66	1805	2289	101.7	98.4	13.0	7.0	3.4	10.3	0.61
8	2017	cr0	66	1946	2315	101.9	100.9	14.1	8.3	1.0	11.6	0.57
9	2018	cr0	78	1815	2612	104.3	99.3	12.7	5.8	5.1	11.6	0.41
10	2019	cr0	56	1446	2204	107.5	101.2	13.9	5.3	6.3	12.6	0.42
11	2020	cr0	24	286	372	103.5	100.1	9.3	4.7	3.4	8.5	0.42
12	2010	cr1	193	800	2470	93.8	93.8	10.4	10.5	0.0	0.8	1.00
13	2011	cr1	155	490	1017	93.8	93.8	9.0	8.8	0.0	0.9	1.00
14	2012	cr1	171	711	1250	96.3	96.6	10.0	9.8	-0.3	1.2	0.99
15	2013	cr1	151	735	1338	98.3	98.7	10.3	10.5	-0.4	1.4	0.99
16	2014	cr1	113	1105	1323	98.5	98.8	10.4	10.2	-0.4	1.4	0.99
17	2015	cr1	83	1634	2007	104.4	105.8	9.6	9.6	-1.4	1.8	0.98
18	2016	cr1	66	1556	1949	103.3	99.2	9.5	6.0	4.1	8.0	0.55
19	2017	cr1	66	1636	1928	103.5	100.6	11.8	6.1	3.0	9.7	0.57
20	2018	cr1	78	1106	1623	106.1	100.7	9.5	5.0	5.3	9.0	0.37
21	2019	cr1	24	407	641	107.0	99.9	9.8	4.4	7.2	8.5	0.50
22	2010	cr2	193	604	1882	93.6	93.6	10.0	10.0	0.0	0.7	1.00
23	2011	cr2	155	374	795	94.2	94.3	9.4	9.3	-0.1	0.9	1.00
24	2012	cr2	171	551	972	96.7	96.9	10.4	10.3	-0.2	1.1	0.99
25	2013	cr2	151	571	1047	97.8	98.2	10.9	11.1	-0.4	1.3	0.99
26	2014	cr2	113	872	1049	99.0	99.3	10.5	10.2	-0.2	1.2	0.99
27	2015	cr2	83	1301	1617	104.3	105.5	9.9	9.9	-1.1	1.7	0.98
28	2016	cr2	66	1218	1531	103.2	99.2	10.1	6.2	4.1	8.2	0.59
29	2017	cr2	66	975	1158	103.9	100.0	11.6	6.3	3.9	9.3	0.60
30	2018	cr2	42	287	459	107.1	101.6	7.9	5.0	5.5	8.9	0.09
31	2010	cr3	193	391	1233	93.3	93.4	10.0	10.0	0.0	0.7	1.00
32	2011	cr3	154	247	532	94.3	94.5	9.3	9.2	-0.1	0.8	1.00
33	2012	cr3	171	367	643	96.9	97.1	10.3	10.2	-0.2	1.0	1.00
34	2013	cr3	151	376	652	97.7	98.1	10.9	11.1	-0.4	1.3	0.99
35	2014	cr3	113	604	740	99.2	99.4	10.3	10.2	-0.3	1.3	0.99
36	2015	cr3	82	904	1149	104.5	105.9	10.0	10.1	-1.4	1.5	0.99
37	2016	cr3	65	623	824	103.7	99.6	10.0	6.1	4.2	8.4	0.55

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	2017	cr3	39	144	180	101.7	99.9	12.1	6.4	1.8	9.5	0.63
39	2010	cr	193	997	3073	93.4	93.5	10.2	10.2	0.0	0.7	1.00
40	2011	cr	155	611	1268	94.0	94.2	9.2	9.2	-0.2	0.8	1.00
41	2012	cr	171	883	1546	96.7	96.8	10.3	10.2	-0.2	1.1	0.99
42	2013	cr	151	908	1638	97.9	98.2	10.8	11.0	-0.3	1.3	0.99
43	2014	cr	114	1352	1629	98.9	99.2	10.3	10.2	-0.3	1.4	0.99
44	2015	cr	83	2005	2443	104.5	105.8	9.8	9.9	-1.3	1.6	0.99
45	2016	cr	66	1909	2398	103.4	99.3	9.8	6.1	4.1	8.1	0.56
46	2017	cr	66	2043	2405	103.7	100.3	11.6	6.3	3.4	9.4	0.59
47	2018	cr	78	1871	2669	106.1	101.0	8.8	5.2	5.1	8.4	0.37
48	2019	cr	56	1453	2215	105.2	100.5	8.2	4.2	4.7	8.0	0.31
49	2020	cr	24	286	372	105.2	101.8	6.0	4.1	3.3	5.2	0.52
50	2010	nrr0	193	892	2781	96.4	96.4	11.3	11.4	0.0	1.2	0.99
51	2011	nrr0	155	540	1143	95.5	95.5	11.1	11.2	0.1	1.4	0.99
52	2012	nrr0	171	782	1387	97.3	97.6	10.9	10.5	-0.3	2.0	0.98
53	2013	nrr0	151	804	1475	98.0	98.0	12.6	12.6	0.0	2.1	0.99
54	2014	nrr0	114	1214	1480	96.4	97.1	12.7	12.7	-0.7	2.5	0.98
55	2015	nrr0	83	1812	2234	100.4	100.5	12.2	12.6	0.0	2.8	0.97
56	2016	nrr0	66	1737	2208	99.3	98.3	13.2	6.7	1.0	11.1	0.54
57	2017	nrr0	66	1877	2239	98.8	100.4	13.2	7.7	-1.5	11.5	0.50
58	2018	nrr0	78	1769	2558	101.0	98.6	12.3	5.6	2.4	11.8	0.31
59	2019	nrr0	56	1632	2406	102.7	100.2	13.9	5.4	2.5	12.6	0.43
60	2020	nrr0	37	483	773	99.0	99.5	10.0	5.0	-0.5	9.0	0.44
61	2010	nrr1	193	766	2371	96.4	96.4	10.0	10.1	0.0	1.0	0.99
62	2011	nrr1	155	470	976	96.2	96.2	9.2	9.1	0.0	1.0	0.99
63	2012	nrr1	171	684	1204	97.5	97.6	9.7	9.5	-0.2	1.5	0.99
64	2013	nrr1	151	706	1288	99.5	99.8	9.9	10.1	-0.3	1.7	0.99
65	2014	nrr1	113	1064	1276	98.0	98.3	9.7	9.5	-0.3	1.8	0.98
66	2015	nrr1	83	1578	1941	103.0	103.3	9.7	9.3	-0.3	2.2	0.97
67	2016	nrr1	66	1504	1886	101.7	100.5	9.2	5.9	1.2	7.5	0.59
68	2017	nrr1	66	1593	1884	101.8	99.9	10.7	5.6	1.9	9.3	0.50
69	2018	nrr1	78	1189	1706	103.1	100.5	9.1	4.2	2.6	9.0	0.25
70	2019	nrr1	35	510	831	104.9	100.8	9.7	3.9	4.1	8.1	0.58
71	2010	nrr2	193	580	1809	94.5	94.5	9.7	9.7	0.0	1.0	1.00
72	2011	nrr2	155	359	764	95.2	95.3	9.5	9.4	-0.1	1.0	0.99
73	2012	nrr2	171	530	936	96.1	96.3	10.1	10.0	-0.2	1.4	0.99
74	2013	nrr2	151	549	1010	97.1	97.5	11.2	11.2	-0.3	1.6	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	2014	nrr2	113	841	1015	97.8	97.9	9.4	9.4	-0.2	1.7	0.98
76	2015	nrr2	83	1259	1569	102.0	102.2	10.3	10.3	-0.2	1.8	0.98
77	2016	nrr2	66	1189	1500	100.7	99.4	11.8	6.4	1.3	9.3	0.61
78	2017	nrr2	66	1082	1268	101.7	99.1	11.6	6.7	2.7	10.0	0.51
79	2018	nrr2	56	402	637	104.2	101.5	9.1	4.4	2.6	9.2	0.22
80	2010	nrr3	193	374	1179	94.7	94.6	9.8	9.8	0.1	0.9	1.00
81	2011	nrr3	154	236	509	95.9	96.0	10.1	10.1	-0.2	1.0	1.00
82	2012	nrr3	171	352	620	96.6	96.8	10.6	10.5	-0.1	1.3	0.99
83	2013	nrr3	151	363	643	97.2	97.6	11.9	11.9	-0.4	1.5	0.99
84	2014	nrr3	113	581	712	98.1	98.1	10.6	10.3	0.1	1.9	0.98
85	2015	nrr3	82	887	1132	102.7	103.2	11.6	11.8	-0.5	1.6	0.99
86	2016	nrr3	65	706	907	102.4	100.2	12.1	6.5	2.2	9.8	0.59
87	2017	nrr3	56	224	311	102.6	99.0	11.7	7.9	3.6	10.1	0.53
88	2010	nrr	193	984	3034	95.2	95.2	9.5	9.5	0.0	0.9	1.00
89	2011	nrr	155	602	1250	95.8	95.9	9.2	9.1	-0.1	1.0	0.99
90	2012	nrr	171	871	1525	96.8	96.9	9.8	9.7	-0.1	1.2	0.99
91	2013	nrr	151	896	1619	97.9	98.3	10.7	10.8	-0.4	1.4	0.99
92	2014	nrr	114	1336	1612	98.0	98.1	9.3	9.2	-0.1	1.6	0.99
93	2015	nrr	83	1983	2421	102.6	103.0	10.1	10.0	-0.3	1.7	0.99
94	2016	nrr	66	1889	2375	101.8	100.1	10.5	6.0	1.7	8.3	0.62
95	2017	nrr	66	2024	2385	101.8	99.2	11.0	6.5	2.7	9.5	0.51
96	2018	nrr	78	1870	2676	103.2	100.9	8.2	4.4	2.4	7.9	0.34
97	2019	nrr	56	1650	2436	102.9	100.2	8.2	4.3	2.7	6.5	0.61
98	2020	nrr	37	483	773	101.5	101.1	4.8	3.6	0.4	4.5	0.46
99	2010	icf1	193	776	2400	98.3	98.3	9.6	9.6	0.0	0.7	1.00
100	2011	icf1	155	475	986	99.4	99.4	8.9	9.0	0.0	0.7	1.00
101	2012	icf1	171	691	1215	99.5	99.5	9.8	9.7	-0.1	0.9	1.00
102	2013	icf1	151	714	1302	100.3	100.4	9.8	10.1	-0.1	1.2	0.99
103	2014	icf1	113	1075	1289	101.7	101.4	9.2	9.5	0.4	1.3	0.99
104	2015	icf1	83	1595	1962	103.0	102.7	8.4	8.6	0.3	1.3	0.99
105	2016	icf1	66	1520	1906	103.4	99.0	9.1	6.3	4.5	6.5	0.70
106	2017	icf1	66	1611	1904	103.0	99.9	7.9	5.2	3.1	6.4	0.59
107	2018	icf1	78	1197	1719	103.4	99.9	7.5	5.0	3.5	6.7	0.49
108	2019	icf1	35	485	812	99.7	97.8	6.1	3.9	1.9	5.1	0.55
109	2010	icf2	193	588	1833	98.2	98.1	9.4	9.4	0.1	0.7	1.00
110	2011	icf2	155	363	774	98.7	98.7	9.0	9.1	0.0	0.7	1.00
111	2012	icf2	171	537	948	99.4	99.4	10.1	10.1	0.0	0.9	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
112	2013	icf2	151	556	1024	100.0	100.0	10.5	10.6	0.0	1.0	1.00
113	2014	icf2	113	851	1025	101.8	101.5	10.0	10.0	0.3	1.0	0.99
114	2015	icf2	83	1274	1585	103.3	103.1	9.9	10.0	0.2	1.2	0.99
115	2016	icf2	66	1203	1516	103.6	98.9	10.0	6.6	4.7	7.1	0.71
116	2017	icf2	66	1089	1274	103.7	99.9	9.2	6.0	3.7	7.2	0.62
117	2018	icf2	53	392	628	103.9	100.0	7.9	6.4	3.9	7.4	0.48
118	2010	icf3	193	381	1202	98.0	98.1	9.5	9.5	0.0	0.6	1.00
119	2011	icf3	154	240	518	98.7	98.7	9.6	9.6	0.0	0.7	1.00
120	2012	icf3	171	358	632	99.9	100.0	10.4	10.3	-0.1	0.9	1.00
121	2013	icf3	151	369	654	100.0	100.0	11.2	11.4	0.0	1.0	1.00
122	2014	icf3	113	590	723	102.4	102.0	10.9	11.0	0.4	1.1	0.99
123	2015	icf3	82	903	1150	103.4	103.2	10.7	10.7	0.3	1.1	0.99
124	2016	icf3	65	715	920	104.3	99.7	10.8	6.5	4.7	7.9	0.69
125	2017	icf3	54	213	299	103.7	100.1	9.8	7.0	3.6	6.8	0.72
126	2010	icf	193	807	2493	98.1	98.1	9.4	9.4	0.0	0.7	1.00
127	2011	icf	155	494	1025	98.9	98.9	9.1	9.2	0.0	0.7	1.00
128	2012	icf	171	718	1261	99.6	99.7	10.0	10.1	0.0	0.9	1.00
129	2013	icf	151	741	1348	100.1	100.1	10.6	10.7	0.0	1.0	1.00
130	2014	icf	113	1114	1336	102.1	101.8	10.0	10.1	0.3	1.1	0.99
131	2015	icf	83	1650	2025	103.4	103.2	9.8	9.9	0.2	1.2	0.99
132	2016	icf	66	1568	1965	103.9	99.2	10.0	6.5	4.7	7.0	0.71
133	2017	icf	66	1650	1948	103.5	100.1	8.7	6.0	3.4	6.6	0.65
134	2018	icf	78	1207	1736	103.5	100.2	7.8	5.8	3.4	6.5	0.58
135	2019	icf	35	485	812	99.7	97.8	5.9	4.1	1.9	4.8	0.59
136	2010	ifl0	193	865	2703	96.8	96.8	11.1	11.3	0.0	1.2	0.99
137	2011	ifl0	155	523	1109	96.5	96.4	10.1	10.1	0.1	1.5	0.99
138	2012	ifl0	171	760	1348	98.0	98.4	10.8	10.5	-0.3	2.0	0.98
139	2013	ifl0	151	780	1431	98.5	98.5	11.6	11.8	0.0	2.2	0.98
140	2014	ifl0	114	1182	1442	97.9	98.2	12.1	12.1	-0.3	2.6	0.98
141	2015	ifl0	83	1762	2175	101.2	101.4	11.6	12.0	-0.1	2.9	0.97
142	2016	ifl0	66	1695	2154	100.7	98.5	12.7	6.4	2.2	11.3	0.45
143	2017	ifl0	66	1834	2191	99.9	101.1	13.1	7.5	-1.2	11.3	0.51
144	2018	ifl0	78	1732	2505	101.8	99.4	11.8	5.6	2.3	11.1	0.36
145	2019	ifl0	56	1604	2364	103.0	100.4	13.2	5.1	2.6	12.4	0.35
146	2020	ifl0	37	479	767	99.6	99.5	9.3	4.6	0.0	8.1	0.49
147	2010	ifl1	193	772	2387	95.2	95.1	11.0	11.1	0.0	0.9	1.00
148	2011	ifl1	155	472	980	95.3	95.2	8.9	8.8	0.1	0.9	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
149	2012	ifl1	171	687	1208	96.8	97.1	10.7	10.6	-0.2	1.2	0.99
150	2013	ifl1	151	710	1296	99.4	99.6	10.4	10.7	-0.3	1.5	0.99
151	2014	ifl1	113	1069	1282	99.3	99.4	10.5	10.5	0.0	1.4	0.99
152	2015	ifl1	83	1588	1955	104.3	104.9	10.4	10.3	-0.6	1.7	0.99
153	2016	ifl1	66	1513	1897	104.0	99.3	9.0	6.6	4.7	7.5	0.57
154	2017	ifl1	66	1603	1897	103.6	100.2	11.4	6.1	3.4	9.0	0.61
155	2018	ifl1	78	1200	1721	105.7	100.6	8.8	5.4	5.1	8.2	0.41
156	2019	ifl1	35	517	841	103.7	99.3	9.0	4.5	4.4	7.7	0.52
157	2010	ifl2	193	585	1822	94.3	94.3	10.7	10.8	0.0	0.8	1.00
158	2011	ifl2	155	361	768	95.0	95.1	9.4	9.4	-0.1	0.9	1.00
159	2012	ifl2	171	533	941	96.5	96.8	11.5	11.4	-0.3	1.1	1.00
160	2013	ifl2	151	553	1019	98.3	98.6	11.5	11.6	-0.3	1.4	0.99
161	2014	ifl2	113	847	1020	99.6	99.5	11.2	10.9	0.1	1.4	0.99
162	2015	ifl2	83	1267	1579	104.3	104.9	11.5	11.6	-0.6	1.7	0.99
163	2016	ifl2	66	1198	1509	103.5	99.0	10.4	6.7	4.5	8.3	0.60
164	2017	ifl2	66	1094	1282	104.2	99.8	12.5	7.0	4.4	9.4	0.67
165	2018	ifl2	56	409	647	107.1	101.9	8.6	6.1	5.3	8.5	0.38
166	2010	ifl3	193	378	1194	93.7	93.6	10.8	10.8	0.1	0.8	1.00
167	2011	ifl3	154	239	514	94.8	94.9	9.8	9.8	-0.1	0.9	1.00
168	2012	ifl3	171	356	628	96.8	97.0	11.7	11.6	-0.2	1.1	1.00
169	2013	ifl3	151	368	653	97.9	98.3	12.0	12.1	-0.4	1.4	0.99
170	2014	ifl3	113	587	719	100.2	99.9	11.4	11.3	0.3	1.4	0.99
171	2015	ifl3	82	898	1145	104.5	105.5	12.4	12.9	-1.0	1.7	0.99
172	2016	ifl3	65	717	921	104.7	99.5	10.2	6.7	5.2	8.5	0.56
173	2017	ifl3	56	229	318	105.1	100.2	13.1	8.2	4.9	9.5	0.69
174	2010	ifl	193	978	3016	94.4	94.3	10.6	10.7	0.1	0.8	1.00
175	2011	ifl	155	598	1243	95.0	95.0	9.1	9.1	0.0	0.9	1.00
176	2012	ifl	171	866	1517	96.7	97.0	11.0	10.9	-0.3	1.1	0.99
177	2013	ifl	151	890	1609	98.5	98.8	11.1	11.2	-0.3	1.3	0.99
178	2014	ifl	114	1329	1603	99.7	99.6	10.7	10.6	0.1	1.2	0.99
179	2015	ifl	83	1972	2408	104.4	105.1	11.2	11.4	-0.8	1.7	0.99
180	2016	ifl	66	1878	2360	104.1	99.3	9.5	6.5	4.8	7.8	0.58
181	2017	ifl	66	2012	2371	104.1	100.0	11.9	6.9	4.0	9.0	0.66
182	2018	ifl	78	1850	2646	105.7	101.1	8.3	5.9	4.6	7.4	0.51
183	2019	ifl	56	1625	2398	103.3	99.9	7.8	4.9	3.3	6.5	0.55
184	2020	ifl	37	479	767	103.6	100.8	5.3	4.2	2.8	4.0	0.67
185	2010	ais0	193	872	2720	97.3	97.4	11.3	11.5	-0.1	1.2	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
186	2011	ais0	155	527	1119	96.7	96.7	10.7	10.7	0.0	1.4	0.99
187	2012	ais0	171	765	1359	97.9	98.0	10.9	10.8	-0.1	1.9	0.98
188	2013	ais0	151	787	1443	99.3	99.1	11.5	11.5	0.2	2.0	0.98
189	2014	ais0	114	1192	1453	98.0	98.0	12.1	12.1	0.0	2.3	0.98
190	2015	ais0	83	1777	2192	101.4	101.3	11.6	12.0	0.2	2.8	0.97
191	2016	ais0	66	1705	2169	100.3	98.9	12.1	6.9	1.4	9.7	0.60
192	2017	ais0	66	1845	2206	99.2	100.1	13.5	7.7	-1.0	11.9	0.47
193	2018	ais0	78	1747	2529	101.3	98.9	11.8	5.3	2.4	11.4	0.29
194	2019	ais0	56	1626	2397	101.5	100.3	12.9	4.8	1.2	11.8	0.41
195	2020	ais0	37	483	774	98.9	99.4	9.7	4.9	-0.6	9.0	0.39
196	2010	ais1	193	760	2352	97.4	97.4	10.6	10.7	-0.1	0.9	1.00
197	2011	ais1	155	466	968	97.5	97.5	9.4	9.3	0.0	0.9	1.00
198	2012	ais1	171	678	1194	98.1	98.1	10.3	10.2	0.0	1.4	0.99
199	2013	ais1	151	701	1279	100.2	100.2	10.1	10.3	0.0	1.5	0.99
200	2014	ais1	113	1058	1270	98.9	98.7	11.0	10.8	0.2	1.6	0.99
201	2015	ais1	83	1569	1932	104.6	104.1	10.5	10.2	0.5	1.7	0.99
202	2016	ais1	66	1496	1876	102.5	99.7	9.4	6.7	2.9	7.8	0.57
203	2017	ais1	66	1586	1876	101.4	99.3	11.8	6.5	2.1	10.0	0.53
204	2018	ais1	78	1173	1686	103.6	99.9	9.8	5.0	3.7	9.3	0.35
205	2019	ais1	31	516	812	102.6	99.7	9.3	5.1	2.9	7.4	0.60
206	2010	ais2	193	576	1796	96.3	96.4	10.3	10.4	-0.1	0.9	1.00
207	2011	ais2	155	356	759	96.6	96.6	10.2	10.2	-0.1	0.9	1.00
208	2012	ais2	171	526	930	97.5	97.5	11.0	11.0	0.0	1.2	0.99
209	2013	ais2	151	545	1005	99.0	99.1	11.7	11.8	-0.1	1.5	0.99
210	2014	ais2	113	837	1008	99.0	98.7	11.4	11.2	0.3	1.6	0.99
211	2015	ais2	83	1253	1560	103.7	103.7	11.2	11.3	0.0	1.6	0.99
212	2016	ais2	66	1184	1494	102.0	99.1	11.1	7.1	2.9	8.9	0.60
213	2017	ais2	66	1064	1247	101.9	98.8	12.6	7.6	3.1	9.9	0.62
214	2018	ais2	53	373	603	104.3	100.6	8.9	5.6	3.7	9.5	0.21
215	2010	ais3	193	371	1172	96.2	96.2	10.6	10.7	0.0	0.9	1.00
216	2011	ais3	154	234	506	96.5	96.6	10.4	10.4	-0.1	1.0	1.00
217	2012	ais3	171	350	616	98.1	98.1	11.0	11.1	0.0	1.2	0.99
218	2013	ais3	151	360	637	99.2	99.2	12.1	12.2	-0.1	1.4	0.99
219	2014	ais3	113	578	709	99.6	99.1	11.2	11.0	0.5	1.6	0.99
220	2015	ais3	82	883	1126	104.0	104.4	11.9	12.2	-0.4	1.5	0.99
221	2016	ais3	65	693	894	103.1	99.8	11.5	7.0	3.2	9.5	0.57
222	2017	ais3	52	207	286	102.5	99.0	12.5	8.4	3.5	9.5	0.65

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
223	2010	ais	193	978	3017	96.6	96.7	10.1	10.2	0.0	0.8	1.00
224	2011	ais	155	598	1244	96.8	96.9	9.7	9.6	0.0	0.8	1.00
225	2012	ais	171	867	1518	98.0	98.0	10.5	10.4	0.0	1.3	0.99
226	2013	ais	151	891	1611	99.5	99.5	11.0	11.1	0.0	1.3	0.99
227	2014	ais	114	1331	1605	99.2	98.9	10.6	10.4	0.3	1.4	0.99
228	2015	ais	83	1975	2412	104.1	104.1	10.8	10.9	0.0	1.4	0.99
229	2016	ais	66	1881	2365	102.6	99.6	10.2	6.6	3.0	8.3	0.58
230	2017	ais	66	2015	2376	101.9	99.0	11.9	7.3	2.9	9.3	0.62
231	2018	ais	78	1861	2663	103.5	100.4	9.1	5.2	3.1	8.4	0.40
232	2019	ais	56	1645	2427	101.7	99.6	8.1	4.7	2.1	7.2	0.47
233	2020	ais	37	483	774	101.9	100.4	6.0	4.1	1.4	5.2	0.52
234	2010	hst0	59	430	755	97.7	97.5	11.5	11.5	0.2	1.7	0.99
235	2011	hst0	60	227	273	103.9	103.7	11.6	11.4	0.2	2.1	0.98
236	2012	hst0	69	288	346	100.3	100.2	11.0	11.0	0.0	2.2	0.98
237	2013	hst0	80	260	390	99.3	100.6	11.8	12.2	-1.4	3.0	0.97
238	2014	hst0	72	237	259	103.6	104.1	11.4	11.3	-0.5	4.0	0.94
239	2015	hst0	72	305	398	98.8	99.9	10.2	9.6	-1.2	4.0	0.92
240	2016	hst0	60	288	432	103.4	100.8	10.6	6.4	2.6	9.4	0.48
241	2017	hst0	58	325	438	102.5	99.2	11.1	5.9	3.3	9.7	0.48
242	2018	hst0	67	271	408	104.1	100.0	10.0	4.3	4.1	8.9	0.45
243	2019	hst0	44	246	347	101.2	99.6	11.0	3.7	1.6	10.4	0.33
244	2020	hst0	13	92	103	98.4	100.5	8.5	2.5	-2.1	7.9	0.40
245	2010	hst1	60	394	695	98.4	98.4	8.1	8.3	0.0	1.3	0.99
246	2011	hst1	60	214	258	102.4	102.4	11.1	11.1	0.0	1.5	0.99
247	2012	hst1	71	270	328	99.4	99.7	10.9	11.0	-0.2	1.7	0.99
248	2013	hst1	80	249	369	100.4	100.9	10.8	11.2	-0.4	2.4	0.98
249	2014	hst1	71	230	243	102.5	103.0	10.7	10.3	-0.5	2.5	0.97
250	2015	hst1	71	293	378	101.8	101.2	10.2	10.4	0.6	3.1	0.95
251	2016	hst1	61	266	396	103.5	100.8	8.9	6.2	2.7	7.4	0.56
252	2017	hst1	56	305	392	104.6	99.1	9.7	5.8	5.5	7.9	0.58
253	2018	hst1	62	202	288	103.8	100.3	10.4	4.9	3.5	9.7	0.38
254	2019	hst1	14	95	97	102.6	98.5	7.7	3.0	4.1	7.6	0.22
255	2010	hst2	58	295	523	97.7	97.9	10.0	10.2	-0.2	1.2	0.99
256	2011	hst2	60	157	192	100.9	100.8	10.8	10.9	0.1	1.3	0.99
257	2012	hst2	68	211	247	99.0	99.3	11.8	11.8	-0.3	1.8	0.99
258	2013	hst2	79	190	281	100.3	100.6	12.1	12.5	-0.3	2.0	0.99
259	2014	hst2	71	176	188	101.7	102.0	11.0	11.1	-0.4	2.4	0.98

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
260	2015	hst2	67	236	297	101.5	101.3	10.9	11.2	0.2	2.5	0.98
261	2016	hst2	58	205	295	103.0	99.4	10.5	6.5	3.6	8.8	0.56
262	2017	hst2	52	177	206	105.4	98.2	10.2	6.4	7.2	8.1	0.61
263	2018	hst2	24	65	102	104.3	99.5	9.8	6.0	4.8	10.8	0.14
264	2010	hst3	55	193	343	97.9	98.1	10.0	9.9	-0.2	0.9	1.00
265	2011	hst3	52	110	126	102.7	102.8	12.3	12.6	-0.1	1.3	0.99
266	2012	hst3	61	149	166	100.9	100.9	11.6	11.6	0.0	1.3	0.99
267	2013	hst3	74	127	167	101.9	102.3	10.6	10.7	-0.4	1.6	0.99
268	2014	hst3	64	125	128	102.4	102.7	10.5	10.8	-0.3	2.0	0.98
269	2015	hst3	60	166	203	101.6	101.9	11.6	11.4	-0.3	1.9	0.99
270	2016	hst3	44	118	155	103.5	100.4	9.3	4.9	3.1	7.5	0.59
271	2017	hst3	14	48	38	105.6	100.1	6.9	5.1	5.6	6.1	0.53
272	2010	hst	60	530	924	98.2	98.3	9.3	9.3	-0.1	1.0	0.99
273	2011	hst	60	289	341	102.0	102.0	11.2	11.4	0.0	1.3	0.99
274	2012	hst	71	358	429	99.6	99.9	11.4	11.2	-0.3	1.3	0.99
275	2013	hst	80	329	482	100.7	101.2	11.0	11.2	-0.4	1.7	0.99
276	2014	hst	72	298	321	102.6	102.9	10.9	10.8	-0.4	1.8	0.99
277	2015	hst	73	371	484	101.6	101.4	10.4	10.5	0.2	2.0	0.98
278	2016	hst	62	338	507	103.5	100.0	9.4	5.8	3.5	7.5	0.60
279	2017	hst	59	376	502	104.4	98.5	10.0	6.3	5.8	7.9	0.61
280	2018	hst	68	301	450	103.7	100.1	8.9	5.2	3.6	7.9	0.48
281	2019	hst	44	250	353	101.8	98.8	5.6	3.8	3.0	4.9	0.51
282	2020	hst	13	92	103	100.5	98.4	7.5	3.8	2.2	4.2	0.92
283	2010	fert	193	807	2493	94.8	94.8	10.7	10.8	0.0	0.8	1.00
284	2011	fert	155	494	1025	95.3	95.4	9.1	9.1	0.0	0.8	1.00
285	2012	fert	171	718	1261	97.1	97.2	11.0	10.9	-0.1	1.0	1.00
286	2013	fert	151	741	1348	98.7	98.9	11.1	11.2	-0.2	1.3	0.99
287	2014	fert	113	1114	1336	99.6	99.5	10.8	10.7	0.1	1.3	0.99
288	2015	fert	83	1650	2025	104.4	105.0	11.2	11.4	-0.6	1.6	0.99
289	2016	fert	66	1568	1965	104.0	99.2	9.5	6.6	4.8	7.8	0.57
290	2017	fert	66	1650	1948	103.6	100.0	12.1	7.1	3.6	9.2	0.65
291	2018	fert	78	1207	1736	105.3	100.8	8.8	5.7	4.4	7.9	0.48
292	2019	fert	35	485	812	103.3	99.6	8.8	5.0	3.7	7.1	0.59
293	2010	interval	193	807	2493	95.3	95.3	10.5	10.5	0.0	0.7	1.00
294	2011	interval	155	494	1025	96.1	96.1	9.0	9.0	0.0	0.8	1.00
295	2012	interval	171	718	1261	97.7	97.8	11.1	11.1	-0.1	1.0	1.00
296	2013	interval	151	741	1348	99.0	99.2	11.2	11.4	-0.2	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
297	2014	interval	113	1114	1336	100.8	100.6	10.8	10.8	0.2	1.0	1.00
298	2015	interval	83	1650	2025	104.5	105.0	11.0	11.2	-0.5	1.3	0.99
299	2016	interval	66	1568	1965	104.6	99.1	9.7	6.7	5.5	7.6	0.63
300	2017	interval	66	1650	1948	104.4	100.1	11.1	6.9	4.3	8.0	0.70
301	2018	interval	78	1207	1736	105.4	100.8	8.3	6.3	4.6	7.2	0.54
302	2019	interval	35	485	812	102.2	98.7	7.5	4.9	3.4	6.3	0.56

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

Obs	diff	d_cr0	d_cr	d_nrr0	d_nrr	d_icf	d_ifl0	d_ifl	d_ais0	d_ais	d_hst	d_fert	d_interval
1	-33	.	.	.	.	.	.	.	1	.	.	.	.
2	-31	1	.	.	.	.	.	.	.	.	.	.	1
3	-30	.	.	2	.	.	.	.	.	.	.	.	.
4	-29	.	.	1	.	.	2	.	3	.	.	.	.
5	-28	.	.	1	.	.	1	.	1	.	.	.	.
6	-27	.	.	.	.	.	1	1	.	.	.	.	.
7	-26	1	.	2	.	1	1	.	.	.	.	1	.
8	-25	.	.	2	.	.	1	.	2	.	1	.	.
9	-24	1	.	1	.	.	.	.	2	.	1	.	.
10	-23	1	.	1	.	.	1	.	1	.	.	.	.
11	-22	4	.	2	.	.	1	.	2	.	.	.	.
12	-21	1	.	1	.	.	2	.	1	.	1	.	.
13	-20	.	.	2	1	.	2	.	2	1	.	.	.
14	-19	1	.	3	1	1	3	.	1	1	.	.	.
15	-18	1	1	3	.	.	3	.	3	1	1	.	.
16	-17	1	1	3	1	.	2	.	1	.	.	1	.
17	-16	1	.	1	2	.	2	.	1	1	.	.	1
18	-15	1	.	5	.	.	2	1	1	1	.	.	.
19	-14	4	1	1	3	.	5	.	5	2	.	1	.
20	-13	2	1	7	1	.	2	1	5	1	.	1	1
21	-12	4	4	5	4	.	4	1	5	4	.	2	.
22	-11	4	4	6	6	2	8	1	5	4	1	.	.
23	-10	7	1	6	5	2	6	2	9	6	1	3	1
24	-9	4	4	6	4	1	7	3	4	7	3	3	1
25	-8	4	5	10	5	5	12	4	10	5	1	2	5
26	-7	12	10	4	10	2	5	9	7	4	1	5	4
27	-6	9	6	5	8	9	10	9	10	7	4	11	6
28	-5	11	8	10	9	4	12	13	10	11	7	14	9
29	-4	17	13	15	15	5	12	7	12	13	8	6	7
30	-3	20	20	19	14	5	16	17	16	7	16	13	6
31	-2	24	44	27	17	15	22	35	21	27	19	20	18
32	-1	20	24	16	40	28	24	29	21	37	17	44	39
33	0	16	26	16	39	48	22	25	22	40	29	16	37
34	1	18	18	29	34	37	18	24	23	25	33	25	22
35	2	11	11	19	16	21	18	17	26	23	26	13	18
36	3	10	15	18	20	12	17	18	19	17	20	10	17

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

Obs	diff	d_cr0	d_cr	d_nrr0	d_nrr	d_icf	d_ifl0	d_ifl	d_ais0	d_ais	d_hst	d_fert	d_interval
37	4	17	10	14	17	22	14	20	18	18	15	7	13
38	5	14	7	20	9	14	19	16	12	10	20	15	14
39	6	14	19	12	17	15	9	16	9	11	15	14	12
40	7	3	16	6	13	8	13	16	10	11	8	12	8
41	8	12	12	6	14	15	5	20	8	14	3	9	7
42	9	8	11	5	7	17	5	10	9	17	13	11	10
43	10	17	11	10	10	9	14	15	8	11	13	11	15
44	11	10	8	7	7	2	9	9	10	5	7	12	11
45	12	10	11	10	8	2	6	13	6	12	9	9	7
46	13	7	8	3	4	14	5	9	5	11	7	9	18
47	14	4	11	9	9	3	8	6	4	4	5	6	4
48	15	2	8	5	4	4	2	2	6	2	3	7	5
49	16	7	3	4	4	2	5	6	3	3	1	2	1
50	17	5	5	3	3	2	3	1	6	2	1	4	1
51	18	2	6	3	2	1	7	4	4	3	4	1	3
52	19	5	5	4	1	.	5	2	6	4	1	3	2
53	20	3	.	8	.	.	2	.	4	.	3	1	2
54	21	2	1	3	.	.	4	.	1	.	.	.	1
55	22	4	2	1	1	.	1	.	5	.	.	2	.
56	23	4	1	2	1	.	2	3	.	.	.	1	.
57	24	3	1	.	.	.	1	.	.	2	.	.	.
58	25	3	.	.	.	.	1	.	.	1	.	.	.
59	26	.	.	.	.	.	1	.	.	.	1	.	1
60	27	.	.	1	.	.	1	1	.	.	.	1	.
61	28	3	.	.	.	.	.	.	.	.	.	.	.
62	30	.	.	1	.	.	.	.	.	.	.	.	.
63	31	2	.	.	.	.	.	.	.	.	.	.	.
64	35	1	.	.	.	.	.	.	.	.	.	.	.

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

Obs	diff	p_cr0	p_cr	p_nrr0	p_nrr	p_icf	p_ifl0	p_ifl	p_ais0	p_ais	p_hst	p_fert	p_interval
1	-33	.	.	.	.	.	.	.	0	.	.	.	.
2	-31	0	.	.	.	.	.	.	.	.	.	.	0
3	-30	.	.	1	.	.	.	.	.	.	.	.	.
4	-29	.	.	0	.	.	1	.	1	.	.	.	.
5	-28	.	.	0	.	.	0	.	0	.	.	.	.
6	-27	.	.	.	.	.	0	0	.	.	.	.	.
7	-26	0	.	1	.	0	0	.	.	.	.	0	.
8	-25	.	.	1	.	.	0	.	1	.	0	.	.
9	-24	0	.	0	.	.	.	.	1	.	0	.	.
10	-23	0	.	0	.	.	0	.	0	.	.	.	.
11	-22	1	.	1	.	.	0	.	1	.	.	.	.
12	-21	0	.	0	.	.	1	.	0	.	0	.	.
13	-20	.	.	1	0	.	1	.	1	0	.	.	.
14	-19	0	.	1	0	0	1	.	0	0	.	.	.
15	-18	0	0	1	.	.	1	.	1	0	0	.	.
16	-17	0	0	1	0	.	1	.	0	.	.	0	.
17	-16	0	.	0	1	.	1	.	0	0	.	.	0
18	-15	0	.	1	.	.	1	0	0	0	.	.	.
19	-14	1	0	0	1	.	1	.	1	1	.	0	.
20	-13	1	0	2	0	.	1	0	1	0	.	0	0
21	-12	1	1	1	1	.	1	0	1	1	.	1	.
22	-11	1	1	2	2	1	2	0	1	1	0	.	.
23	-10	2	0	2	1	1	2	1	2	2	0	1	0
24	-9	1	1	2	1	0	2	1	1	2	1	1	0
25	-8	1	1	3	1	2	3	1	3	1	0	1	2
26	-7	3	3	1	3	1	1	2	2	1	0	2	1
27	-6	2	2	1	2	3	3	2	3	2	1	3	2
28	-5	3	2	3	2	1	3	3	3	3	2	4	3
29	-4	5	3	4	4	2	3	2	3	3	3	2	2
30	-3	5	5	5	4	2	4	4	4	2	5	4	2
31	-2	6	12	7	4	5	6	9	5	7	6	6	5
32	-1	5	6	4	10	9	6	8	5	10	5	13	12
33	0	4	7	4	10	15	6	6	6	10	9	5	11
34	1	5	5	8	9	11	5	6	6	6	10	8	7
35	2	3	3	5	4	6	5	4	7	6	8	4	5
36	3	3	4	5	5	4	4	5	5	4	6	3	5

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

Obs	diff	p_cr0	p_cr	p_nrr0	p_nrr	p_icf	p_ifl0	p_ifl	p_ais0	p_ais	p_hst	p_fert	p_interval
37	4	5	3	4	4	7	4	5	5	5	5	2	4
38	5	4	2	5	2	4	5	4	3	3	6	5	4
39	6	4	5	3	4	5	2	4	2	3	5	4	4
40	7	1	4	2	3	2	3	4	3	3	3	4	2
41	8	3	3	2	4	5	1	5	2	4	1	3	2
42	9	2	3	1	2	5	1	3	2	4	4	3	3
43	10	5	3	3	3	3	4	4	2	3	4	3	5
44	11	3	2	2	2	1	2	2	3	1	2	4	3
45	12	3	3	3	2	1	2	3	2	3	3	3	2
46	13	2	2	1	1	4	1	2	1	3	2	3	5
47	14	1	3	2	2	1	2	2	1	1	2	2	1
48	15	1	2	1	1	1	1	1	2	1	1	2	2
49	16	2	1	1	1	1	1	2	1	1	0	1	0
50	17	1	1	1	1	1	1	0	2	1	0	1	0
51	18	1	2	1	1	0	2	1	1	1	1	0	1
52	19	1	1	1	0	.	1	1	2	1	0	1	1
53	20	1	.	2	.	.	1	.	1	.	1	0	1
54	21	1	0	1	.	.	1	.	0	.	.	.	0
55	22	1	1	0	0	.	0	.	1	.	.	1	.
56	23	1	0	1	0	.	1	1	.	.	.	0	.
57	24	1	0	.	.	.	0	.	.	1	.	.	.
58	25	1	.	.	.	.	0	.	.	0	.	.	.
59	26	.	.	.	.	.	0	.	.	.	0	.	0
60	27	.	.	0	.	.	0	0	.	.	.	0	.
61	28	1	.	.	.	.	.	.	.	.	.	.	.
62	30	.	.	0	.	.	.	.	.	.	.	.	.
63	31	1	.	.	.	.	.	.	.	.	.	.	.
64	35	0	.	.	.	.	.	.	.	.	.	.	.

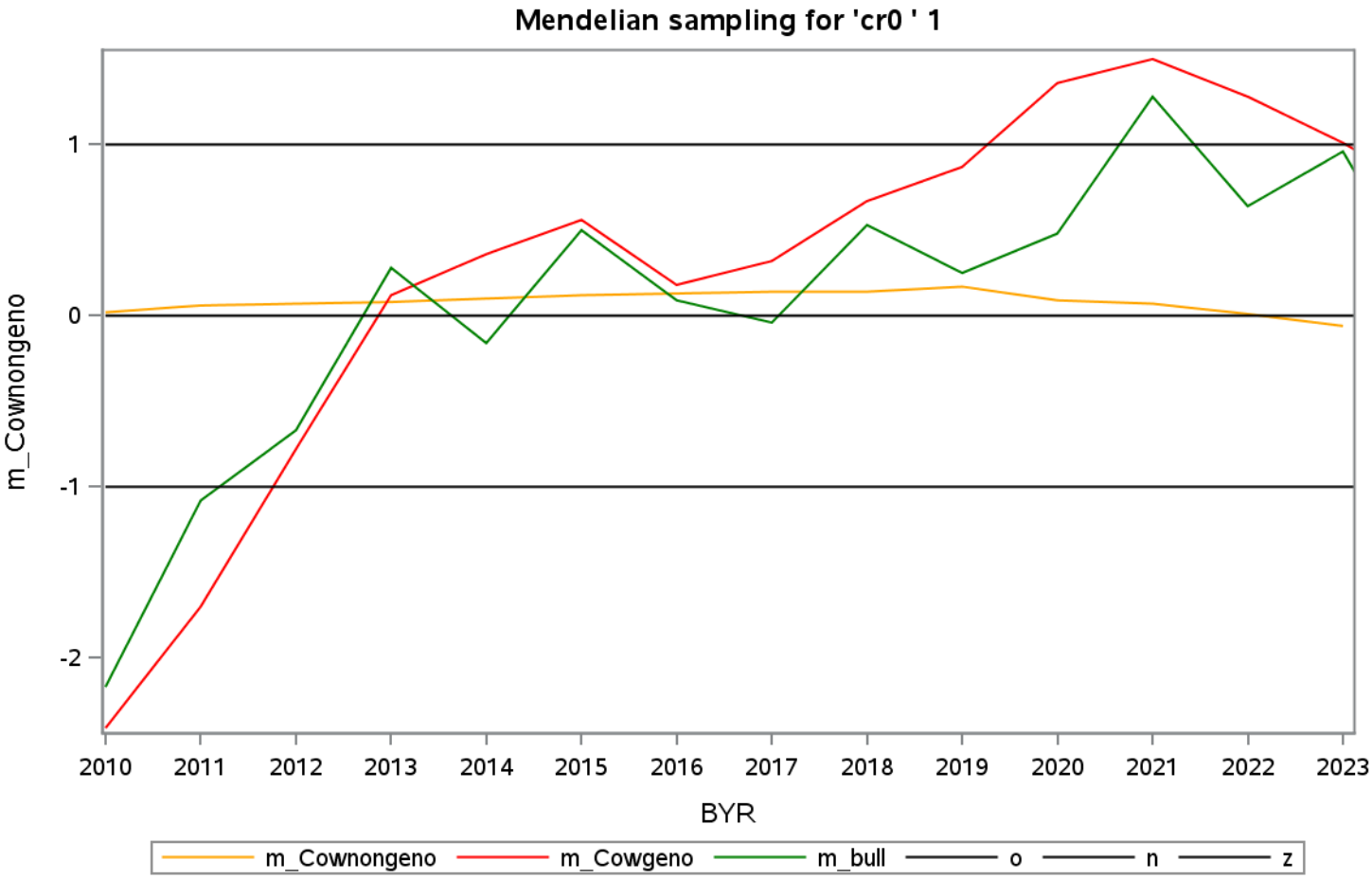
HOL Legarra Reverter regression for SS for bulls, born after 2015 and with minimum 15 offspring in full and no offspring in reduc

Obs	status	t	name	no	b1	rsq
1	1&2	1	cr0	853	1.03	0.57
2	1&2	2	cr1	602	1.02	0.66
3	1&2	3	cr2	377	0.99	0.65
4	1&2	4	cr3	152	1.02	0.64
5	1&2	5	cr	858	1.01	0.73
6	1&2	6	nrr0	898	0.96	0.51
7	1&2	7	nrr1	638	0.98	0.58
8	1&2	8	nrr2	433	0.97	0.58
9	1&2	9	nrr3	192	1.00	0.58
10	1&2	10	nrr	906	1.00	0.69
11	1&2	11	icf1	638	0.96	0.75
12	1&2	12	icf2	425	1.00	0.77
13	1&2	13	icf3	189	1.00	0.80
14	1&2	14	icf	639	0.99	0.81
15	1&2	15	ifl0	897	0.90	0.43
16	1&2	16	ifl1	639	0.98	0.69
17	1&2	17	ifl2	433	0.97	0.69
18	1&2	18	ifl3	192	0.98	0.70
19	1&2	19	ifl	906	0.99	0.79
20	1&2	20	ais0	898	0.95	0.50
21	1&2	21	ais1	632	1.02	0.66
22	1&2	22	ais2	421	0.98	0.64
23	1&2	23	ais3	182	0.98	0.66
24	1&2	24	ais	906	1.00	0.74
25	1&2	25	hst0	438	0.75	0.35
26	1&2	26	hst1	327	0.80	0.49
27	1&2	27	hst2	208	0.89	0.62
28	1&2	28	hst3	78	0.92	0.63
29	1&2	29	hst	446	0.91	0.68
30	1&2	34	fert	639	0.99	0.73
31	1&2	35	inte	639	0.99	0.79

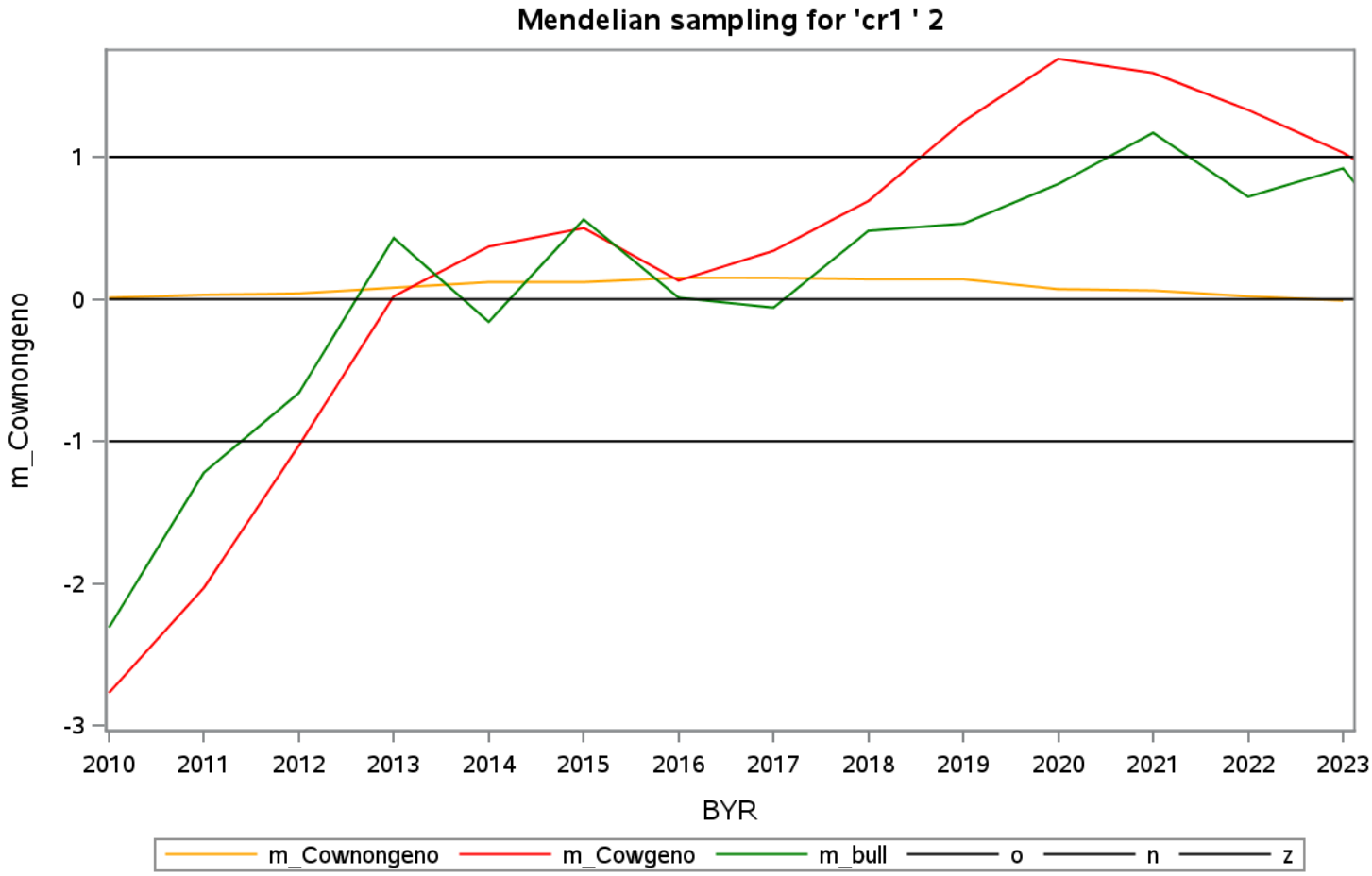
HOL Legarra Reverter regression for EBV for bulls, born after 2015 and with minimum 15 offspring in full and no offspring in reduc

Obs	status	t	name	no	b1	rsq
1	1&2	1	cr0	853	0.97	0.28
2	1&2	2	cr1	602	0.97	0.30
3	1&2	3	cr2	377	0.96	0.32
4	1&2	4	cr3	152	0.97	0.32
5	1&2	5	cr	858	0.96	0.33
6	1&2	6	nrr0	898	0.89	0.22
7	1&2	7	nrr1	638	0.88	0.23
8	1&2	8	nrr2	433	0.88	0.27
9	1&2	9	nrr3	192	0.88	0.28
10	1&2	10	nrr	906	0.89	0.30
11	1&2	11	icf1	638	1.05	0.43
12	1&2	12	icf2	425	1.09	0.47
13	1&2	13	icf3	189	1.16	0.53
14	1&2	14	icf	639	1.08	0.49
15	1&2	15	ifl0	897	0.89	0.19
16	1&2	16	ifl1	639	1.01	0.36
17	1&2	17	ifl2	433	1.01	0.38
18	1&2	18	ifl3	192	0.98	0.38
19	1&2	19	ifl	906	1.01	0.43
20	1&2	20	ais0	898	0.85	0.18
21	1&2	21	ais1	632	0.96	0.31
22	1&2	22	ais2	421	0.94	0.33
23	1&2	23	ais3	182	0.95	0.35
24	1&2	24	ais	906	0.95	0.35
25	1&2	25	hst0	438	0.88	0.16
26	1&2	26	hst1	327	0.93	0.28
27	1&2	27	hst2	208	0.97	0.32
28	1&2	28	hst3	78	1.13	0.43
29	1&2	29	hst	446	0.98	0.38
30	1&2	34	fert	639	1.03	0.40
31	1&2	35	inte	639	1.05	0.46

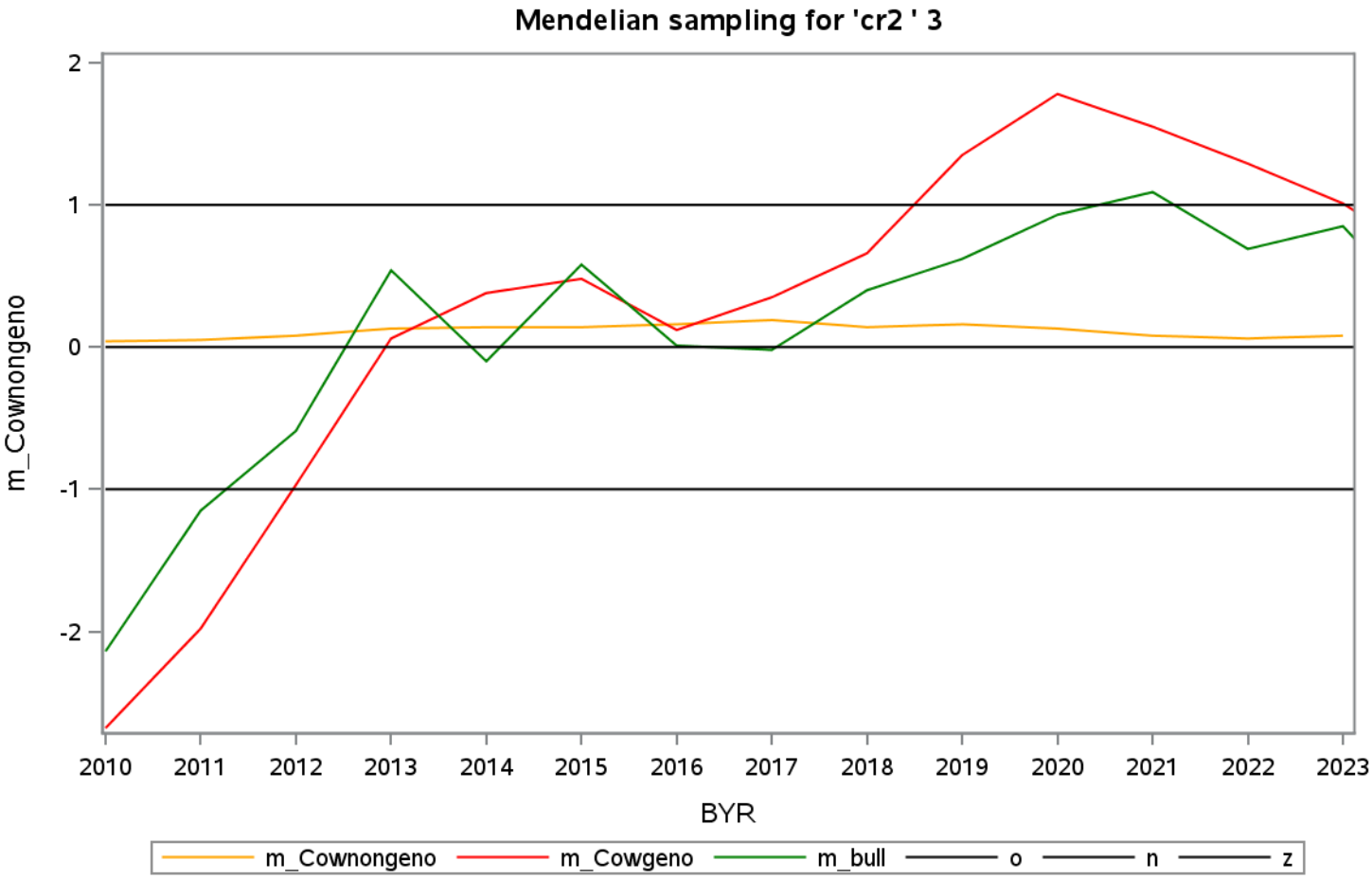
Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	0.02	-2.41	-2.17	190762	1155	720
2	2011	0.06	-1.70	-1.08	190687	2525	1186
3	2012	0.07	-0.78	-0.67	187914	4071	1566
4	2013	0.08	0.12	0.28	180568	6994	1660
5	2014	0.10	0.36	-0.16	179312	7701	1837
6	2015	0.12	0.56	0.50	167249	10117	1820
7	2016	0.13	0.18	0.09	159783	16861	2148
8	2017	0.14	0.32	-0.04	134471	24932	2285
9	2018	0.14	0.67	0.53	117544	34013	2181
10	2019	0.17	0.87	0.25	108692	39121	2330
11	2020	0.09	1.36	0.48	104404	45550	2170
12	2021	0.07	1.50	1.28	89802	38704	1647
13	2022	0.01	1.28	0.64	50529	38286	1672
14	2023	-0.06	1.01	0.96	79	40006	1855
15	2024	.	0.69	0.00	.	9691	631



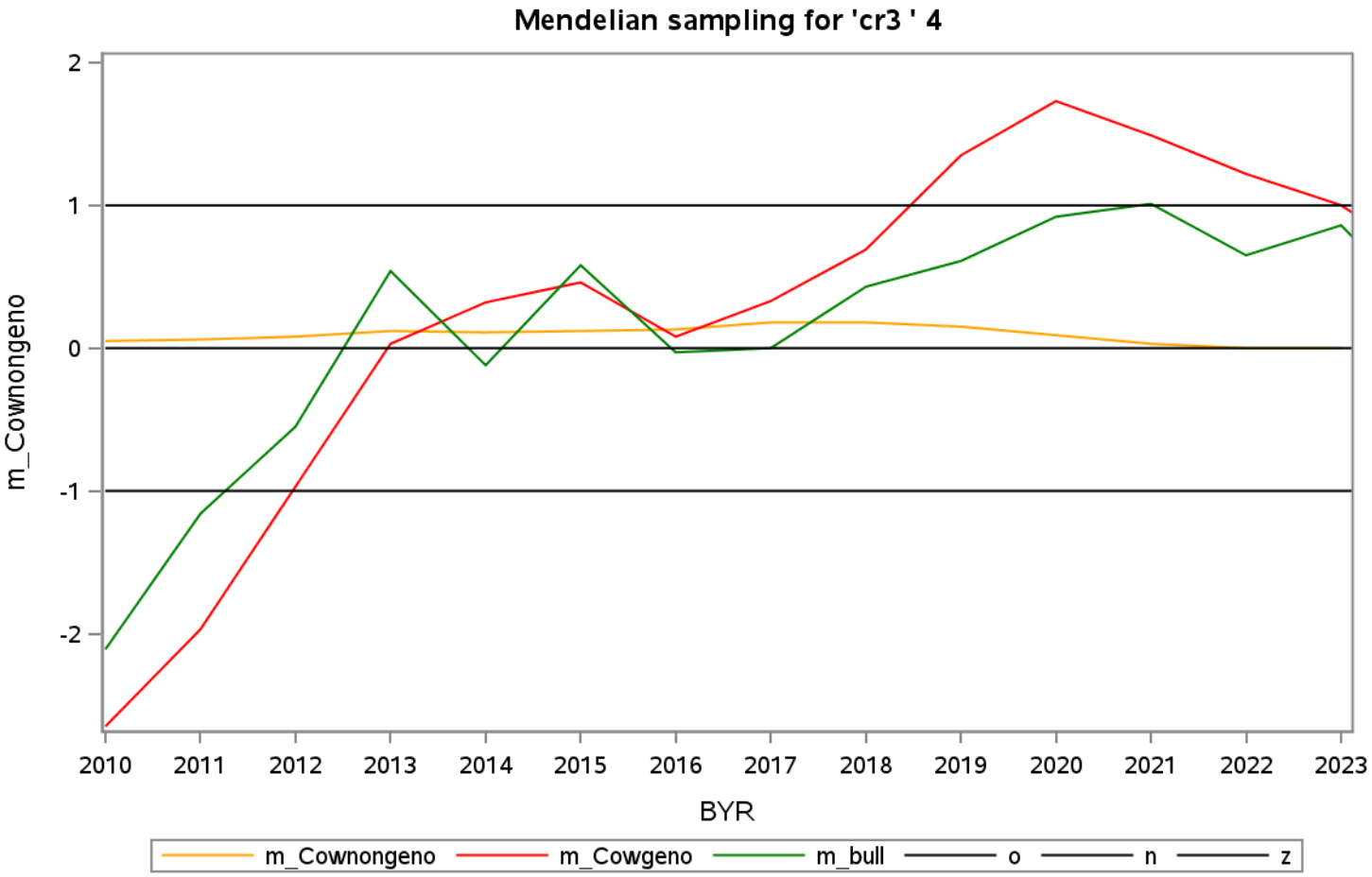
Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	0.01	-2.77	-2.31	190762	1155	720
2	2011	0.03	-2.03	-1.22	190687	2525	1186
3	2012	0.04	-1.03	-0.66	187914	4071	1566
4	2013	0.08	0.02	0.43	180568	6994	1660
5	2014	0.12	0.37	-0.16	179312	7701	1837
6	2015	0.12	0.50	0.56	167249	10117	1820
7	2016	0.15	0.13	0.01	159783	16861	2148
8	2017	0.15	0.34	-0.06	134471	24932	2285
9	2018	0.14	0.69	0.48	117544	34013	2181
10	2019	0.14	1.25	0.53	108692	39121	2330
11	2020	0.07	1.69	0.81	104404	45550	2170
12	2021	0.06	1.59	1.17	89802	38704	1647
13	2022	0.02	1.33	0.72	50529	38286	1672
14	2023	-0.01	1.03	0.92	79	40006	1855
15	2024	.	0.63	0.08	.	9691	631



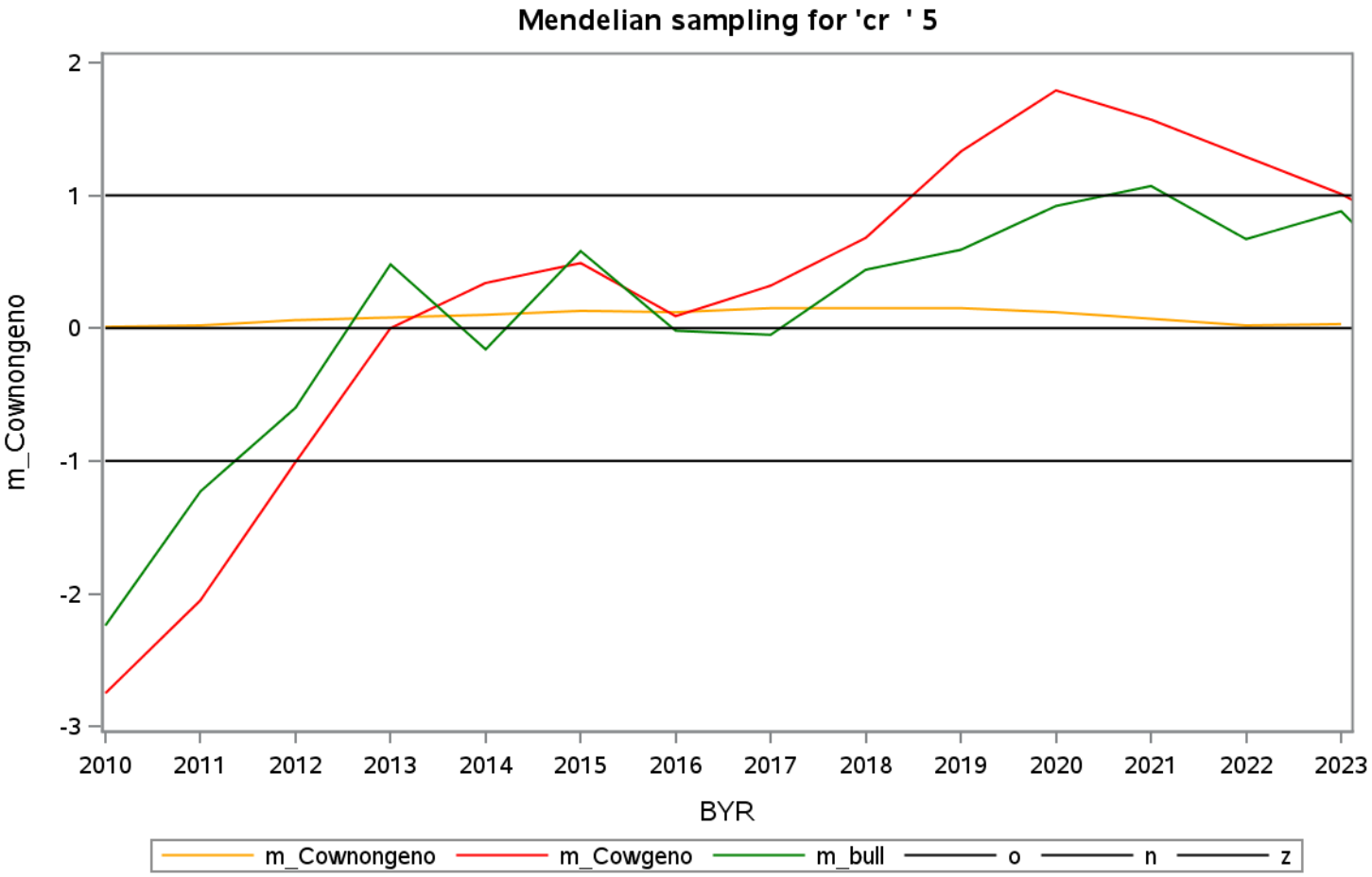
Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	0.04	-2.68	-2.14	190762	1155	720
2	2011	0.05	-1.98	-1.15	190687	2525	1186
3	2012	0.08	-0.97	-0.59	187914	4071	1566
4	2013	0.13	0.06	0.54	180568	6994	1660
5	2014	0.14	0.38	-0.10	179312	7701	1837
6	2015	0.14	0.48	0.58	167249	10117	1820
7	2016	0.16	0.12	0.01	159783	16861	2148
8	2017	0.19	0.35	-0.02	134471	24932	2285
9	2018	0.14	0.66	0.40	117544	34013	2181
10	2019	0.16	1.35	0.62	108692	39121	2330
11	2020	0.13	1.78	0.93	104404	45550	2170
12	2021	0.08	1.55	1.09	89802	38704	1647
13	2022	0.06	1.29	0.69	50529	38286	1672
14	2023	0.08	1.01	0.85	79	40006	1855
15	2024	.	0.58	0.13	.	9691	631



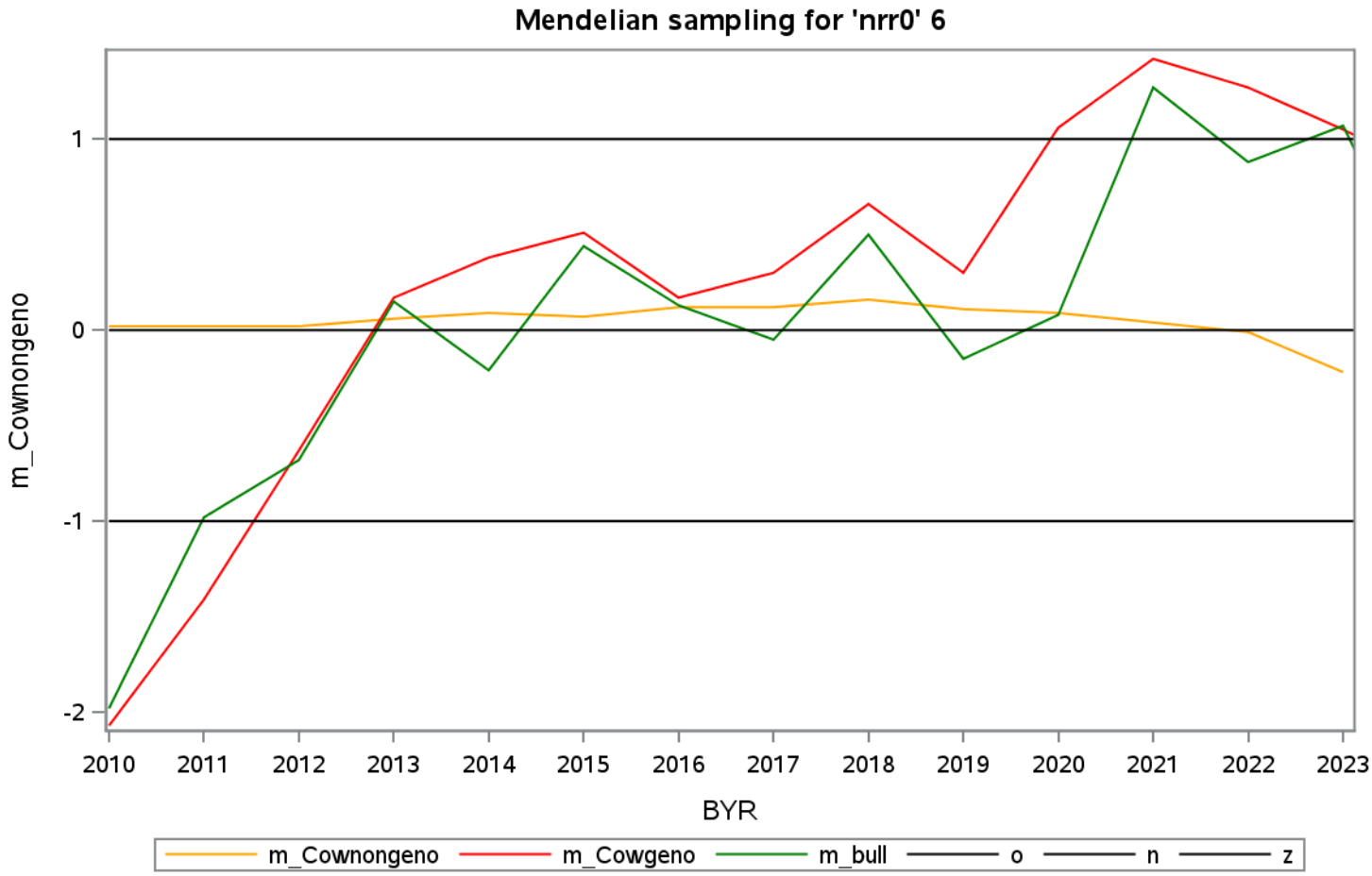
Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	0.05	-2.65	-2.11	190762	1155	720
2	2011	0.06	-1.97	-1.16	190687	2525	1186
3	2012	0.08	-0.97	-0.55	187914	4071	1566
4	2013	0.12	0.03	0.54	180568	6994	1660
5	2014	0.11	0.32	-0.12	179312	7701	1837
6	2015	0.12	0.46	0.58	167249	10117	1820
7	2016	0.13	0.08	-0.03	159783	16861	2148
8	2017	0.18	0.33	0.00	134471	24932	2285
9	2018	0.18	0.69	0.43	117544	34013	2181
10	2019	0.15	1.35	0.61	108692	39121	2330
11	2020	0.09	1.73	0.92	104404	45550	2170
12	2021	0.03	1.49	1.01	89802	38704	1647
13	2022	0.00	1.22	0.65	50529	38286	1672
14	2023	0.00	1.00	0.86	79	40006	1855
15	2024	.	0.57	0.18	.	9691	631



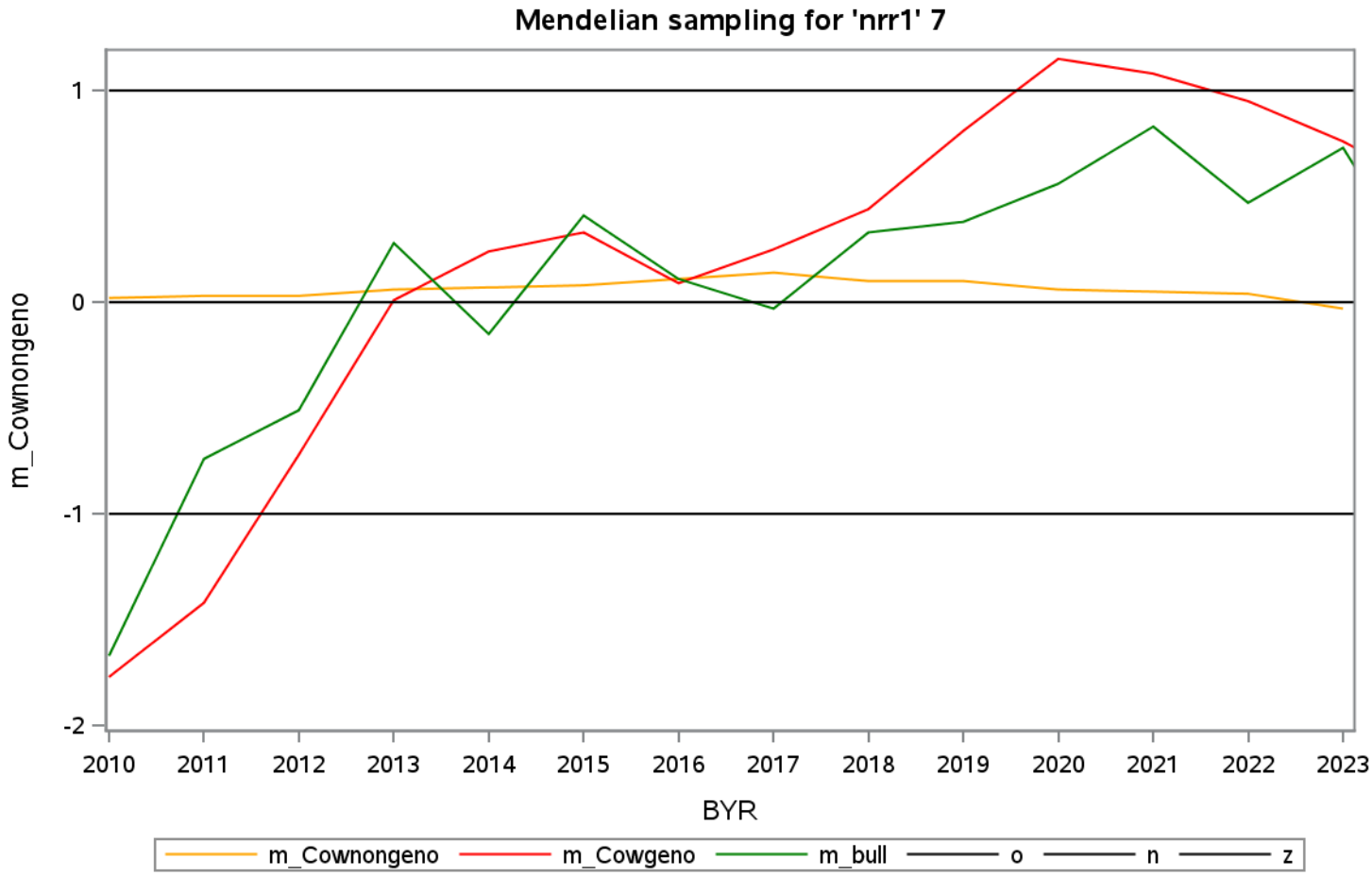
Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	0.01	-2.75	-2.24	190762	1155	720
2	2011	0.02	-2.05	-1.23	190687	2525	1186
3	2012	0.06	-1.01	-0.60	187914	4071	1566
4	2013	0.08	0.00	0.48	180568	6994	1660
5	2014	0.10	0.34	-0.16	179312	7701	1837
6	2015	0.13	0.49	0.58	167249	10117	1820
7	2016	0.12	0.09	-0.02	159783	16861	2148
8	2017	0.15	0.32	-0.05	134471	24932	2285
9	2018	0.15	0.68	0.44	117544	34013	2181
10	2019	0.15	1.33	0.59	108692	39121	2330
11	2020	0.12	1.79	0.92	104404	45550	2170
12	2021	0.07	1.57	1.07	89802	38704	1647
13	2022	0.02	1.29	0.67	50529	38286	1672
14	2023	0.03	1.01	0.88	79	40006	1855
15	2024	.	0.63	0.17	.	9691	631



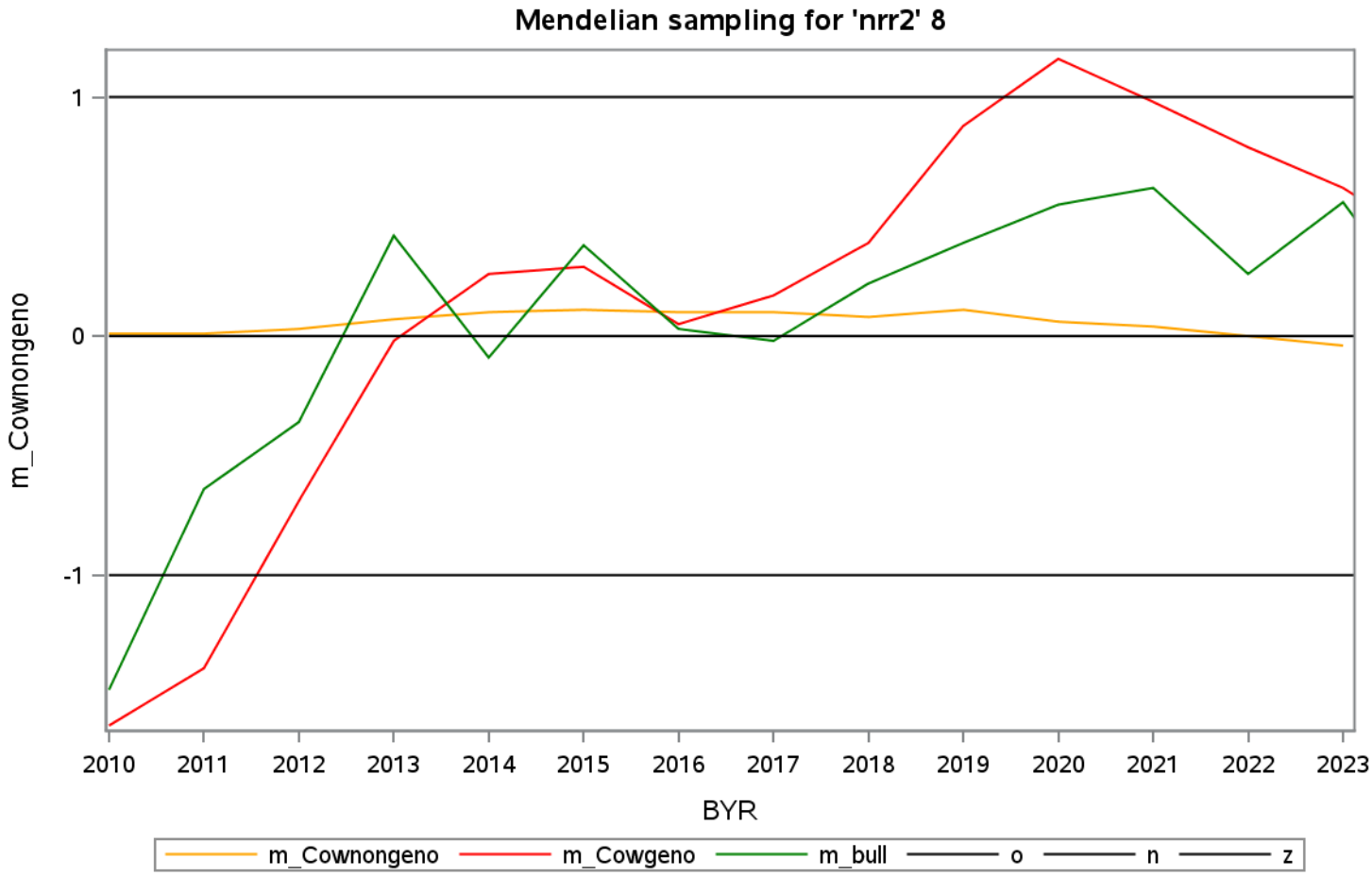
Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	0.02	-2.07	-1.98	190762	1155	720
2	2011	0.02	-1.41	-0.98	190687	2525	1186
3	2012	0.02	-0.63	-0.68	187914	4071	1566
4	2013	0.06	0.17	0.15	180568	6994	1660
5	2014	0.09	0.38	-0.21	179312	7701	1837
6	2015	0.07	0.51	0.44	167249	10117	1820
7	2016	0.12	0.17	0.13	159783	16861	2148
8	2017	0.12	0.30	-0.05	134471	24932	2285
9	2018	0.16	0.66	0.50	117544	34013	2181
10	2019	0.11	0.30	-0.15	108692	39121	2330
11	2020	0.09	1.06	0.08	104404	45550	2170
12	2021	0.04	1.42	1.27	89802	38704	1647
13	2022	-0.01	1.27	0.88	50529	38286	1672
14	2023	-0.22	1.05	1.07	79	40006	1855
15	2024	.	0.81	0.05	.	9691	631



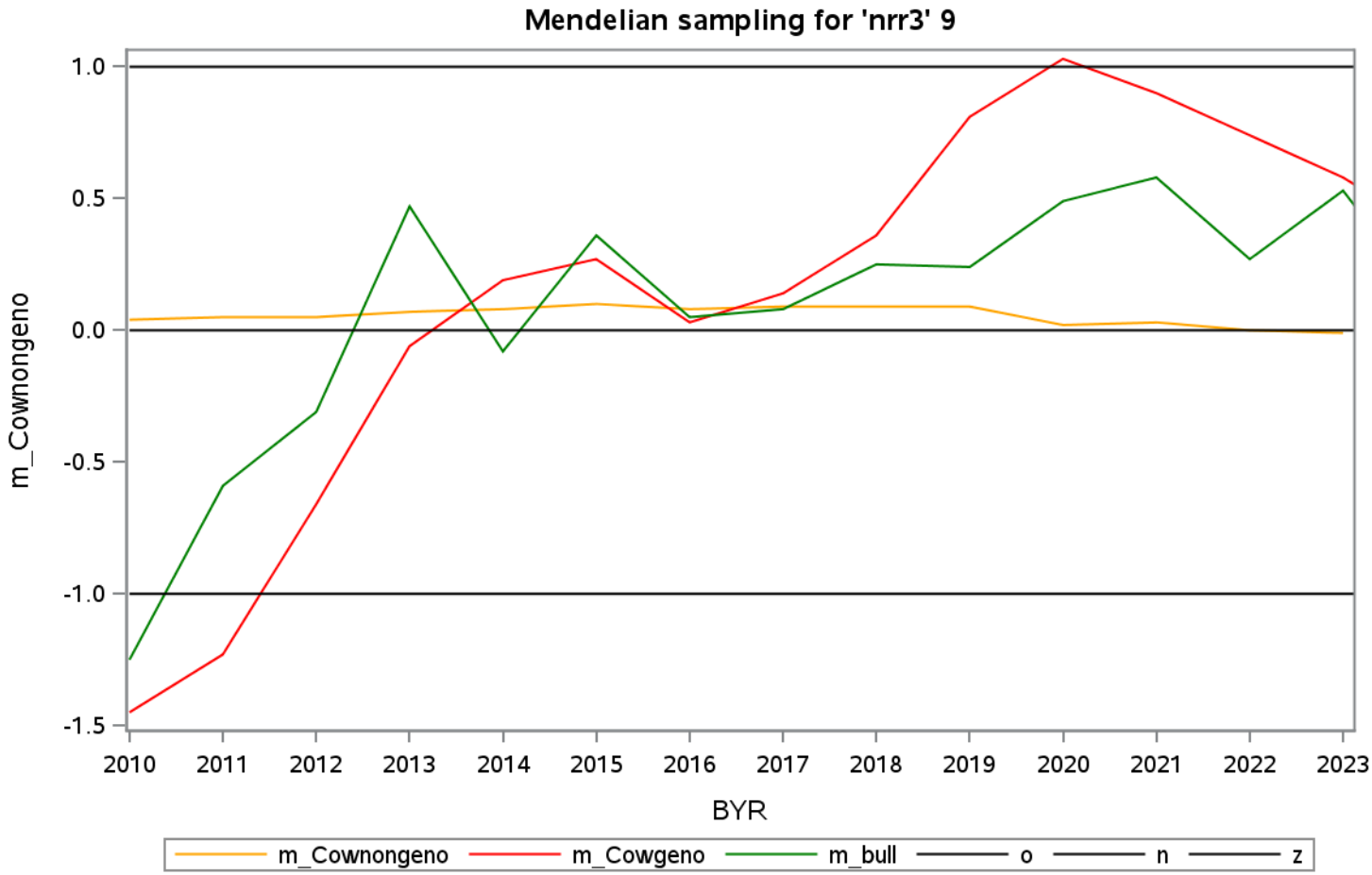
Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	0.02	-1.77	-1.67	190762	1155	720
2	2011	0.03	-1.42	-0.74	190687	2525	1186
3	2012	0.03	-0.72	-0.51	187914	4071	1566
4	2013	0.06	0.01	0.28	180568	6994	1660
5	2014	0.07	0.24	-0.15	179312	7701	1837
6	2015	0.08	0.33	0.41	167249	10117	1820
7	2016	0.11	0.09	0.11	159783	16861	2148
8	2017	0.14	0.25	-0.03	134471	24932	2285
9	2018	0.10	0.44	0.33	117544	34013	2181
10	2019	0.10	0.81	0.38	108692	39121	2330
11	2020	0.06	1.15	0.56	104404	45550	2170
12	2021	0.05	1.08	0.83	89802	38704	1647
13	2022	0.04	0.95	0.47	50529	38286	1672
14	2023	-0.03	0.76	0.73	79	40006	1855
15	2024	.	0.52	0.01	.	9691	631



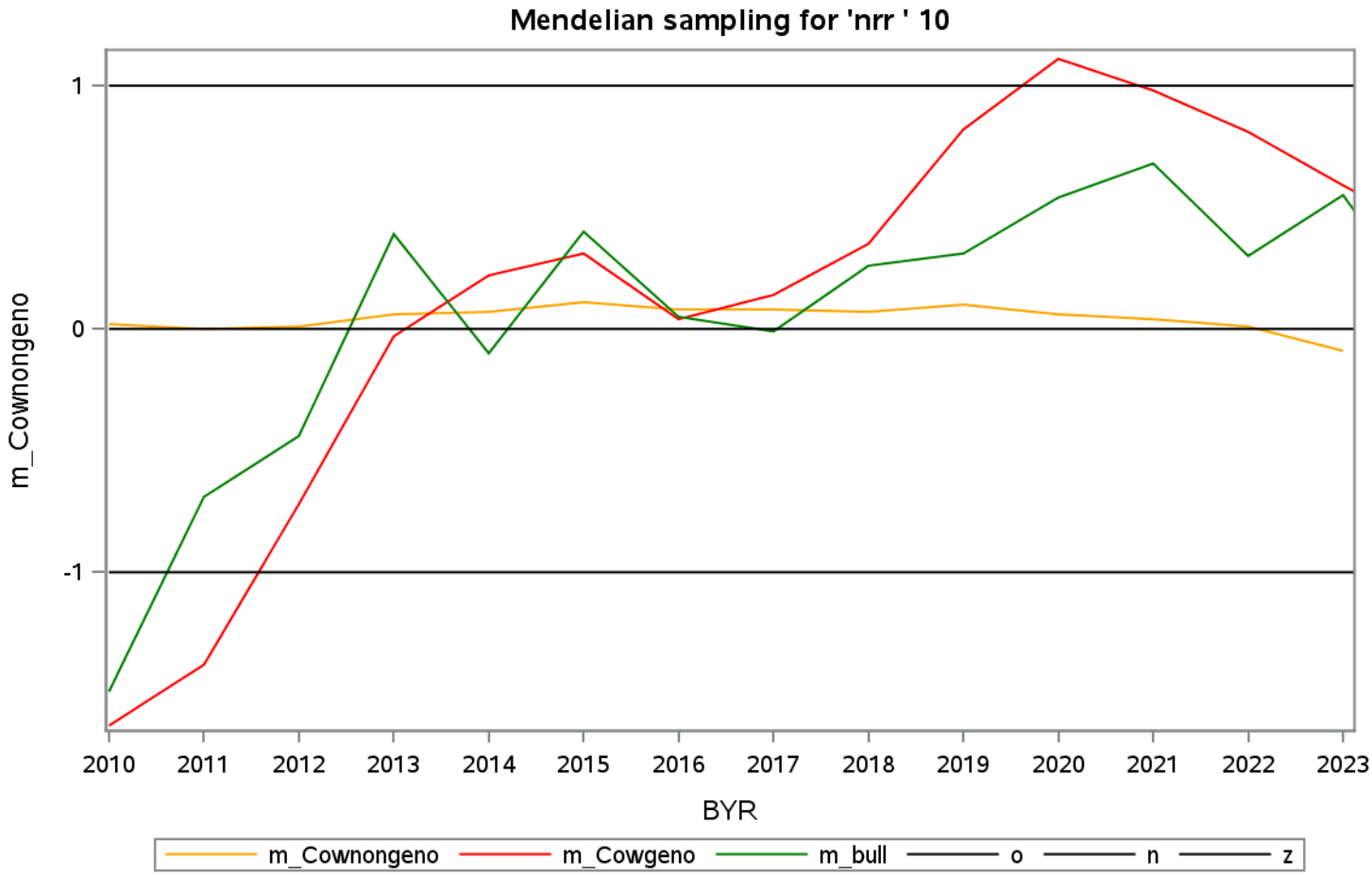
Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	0.01	-1.63	-1.48	190762	1155	720
2	2011	0.01	-1.39	-0.64	190687	2525	1186
3	2012	0.03	-0.69	-0.36	187914	4071	1566
4	2013	0.07	-0.02	0.42	180568	6994	1660
5	2014	0.10	0.26	-0.09	179312	7701	1837
6	2015	0.11	0.29	0.38	167249	10117	1820
7	2016	0.10	0.05	0.03	159783	16861	2148
8	2017	0.10	0.17	-0.02	134471	24932	2285
9	2018	0.08	0.39	0.22	117544	34013	2181
10	2019	0.11	0.88	0.39	108692	39121	2330
11	2020	0.06	1.16	0.55	104404	45550	2170
12	2021	0.04	0.98	0.62	89802	38704	1647
13	2022	0.00	0.79	0.26	50529	38286	1672
14	2023	-0.04	0.62	0.56	79	40006	1855
15	2024	.	0.37	0.02	.	9691	631



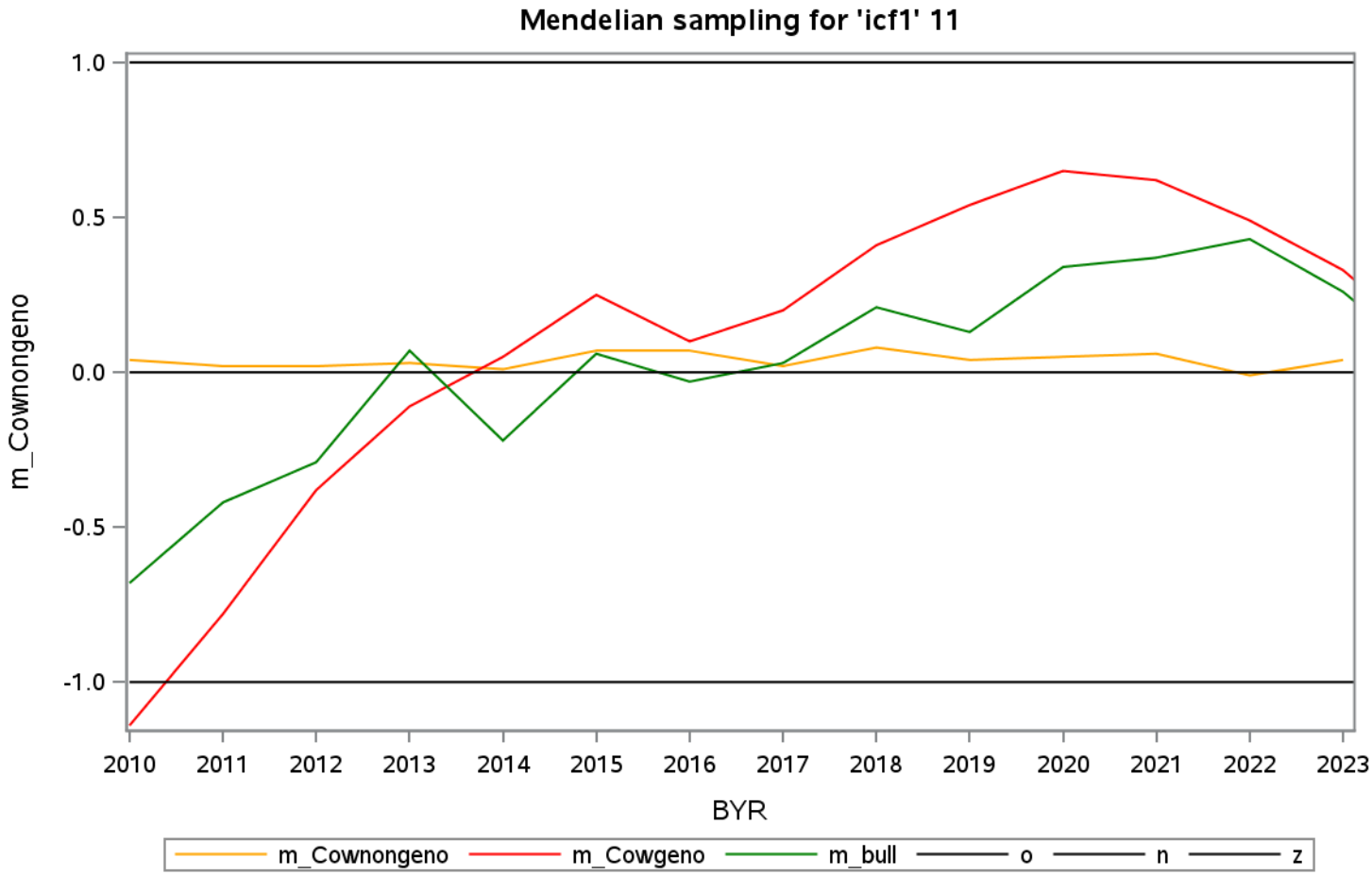
Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	0.04	-1.45	-1.25	190762	1155	720
2	2011	0.05	-1.23	-0.59	190687	2525	1186
3	2012	0.05	-0.66	-0.31	187914	4071	1566
4	2013	0.07	-0.06	0.47	180568	6994	1660
5	2014	0.08	0.19	-0.08	179312	7701	1837
6	2015	0.10	0.27	0.36	167249	10117	1820
7	2016	0.08	0.03	0.05	159783	16861	2148
8	2017	0.09	0.14	0.08	134471	24932	2285
9	2018	0.09	0.36	0.25	117544	34013	2181
10	2019	0.09	0.81	0.24	108692	39121	2330
11	2020	0.02	1.03	0.49	104404	45550	2170
12	2021	0.03	0.90	0.58	89802	38704	1647
13	2022	0.00	0.74	0.27	50529	38286	1672
14	2023	-0.01	0.58	0.53	79	40006	1855
15	2024	.	0.36	0.07	.	9691	631



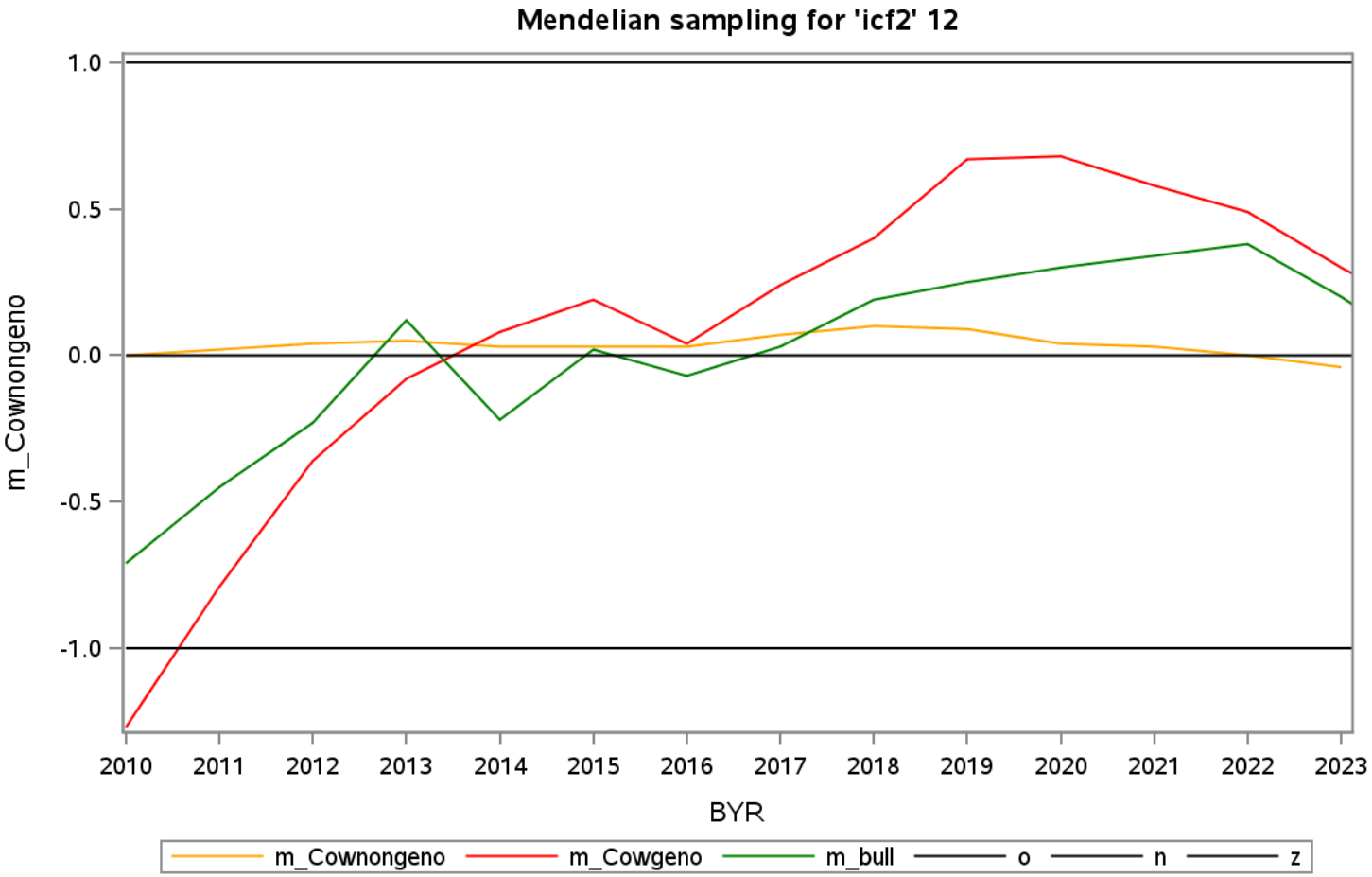
Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	0.02	-1.63	-1.49	190762	1155	720
2	2011	0.00	-1.38	-0.69	190687	2525	1186
3	2012	0.01	-0.72	-0.44	187914	4071	1566
4	2013	0.06	-0.03	0.39	180568	6994	1660
5	2014	0.07	0.22	-0.10	179312	7701	1837
6	2015	0.11	0.31	0.40	167249	10117	1820
7	2016	0.08	0.04	0.05	159783	16861	2148
8	2017	0.08	0.14	-0.01	134471	24932	2285
9	2018	0.07	0.35	0.26	117544	34013	2181
10	2019	0.10	0.82	0.31	108692	39121	2330
11	2020	0.06	1.11	0.54	104404	45550	2170
12	2021	0.04	0.98	0.68	89802	38704	1647
13	2022	0.01	0.81	0.30	50529	38286	1672
14	2023	-0.09	0.59	0.55	79	40006	1855
15	2024	.	0.38	0.01	.	9691	631



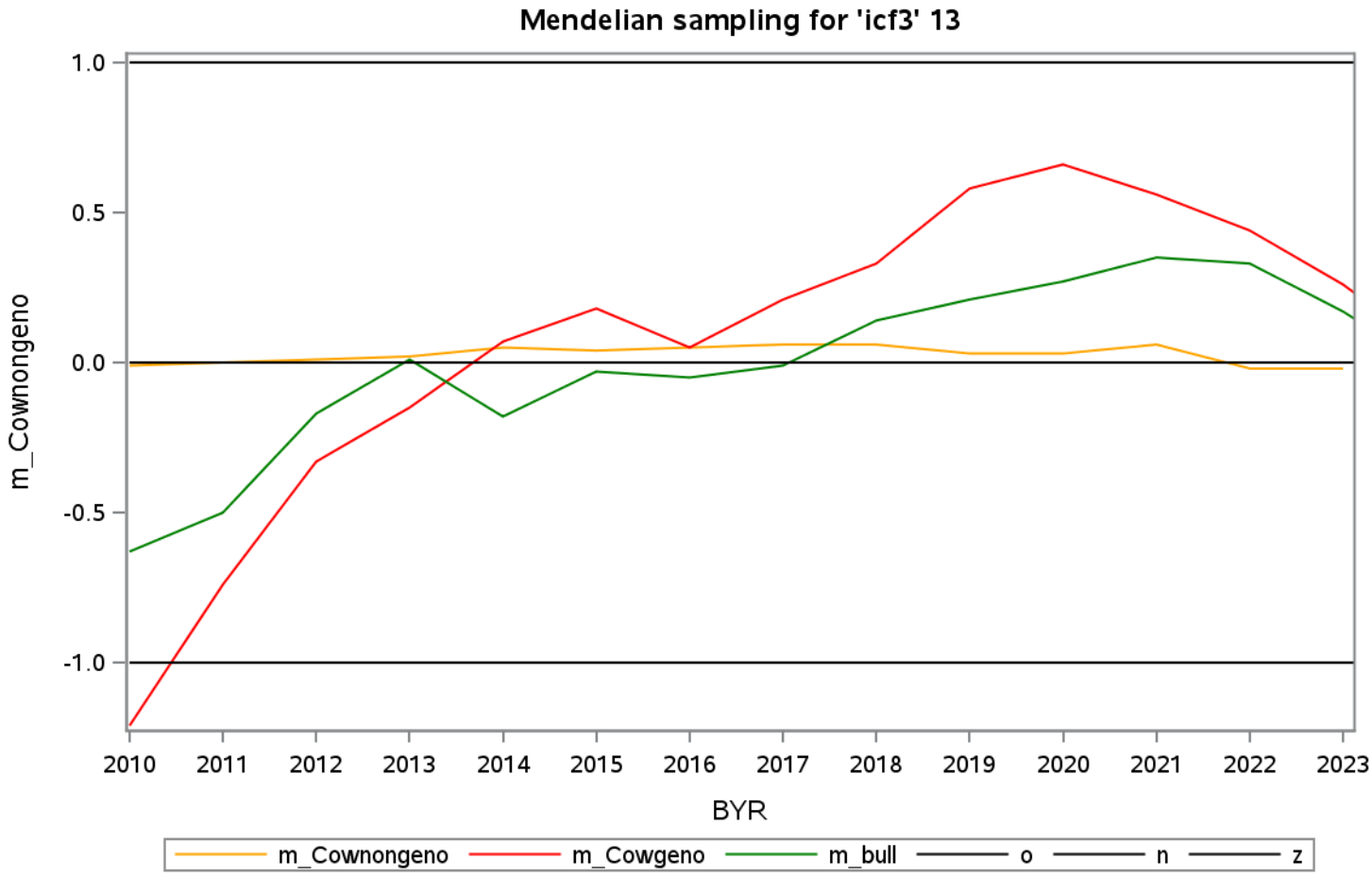
Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	0.04	-1.14	-0.68	190762	1155	720
2	2011	0.02	-0.78	-0.42	190687	2525	1186
3	2012	0.02	-0.38	-0.29	187914	4071	1566
4	2013	0.03	-0.11	0.07	180568	6994	1660
5	2014	0.01	0.05	-0.22	179312	7701	1837
6	2015	0.07	0.25	0.06	167249	10117	1820
7	2016	0.07	0.10	-0.03	159783	16861	2148
8	2017	0.02	0.20	0.03	134471	24932	2285
9	2018	0.08	0.41	0.21	117544	34013	2181
10	2019	0.04	0.54	0.13	108692	39121	2330
11	2020	0.05	0.65	0.34	104404	45550	2170
12	2021	0.06	0.62	0.37	89802	38704	1647
13	2022	-0.01	0.49	0.43	50529	38286	1672
14	2023	0.04	0.33	0.26	79	40006	1855
15	2024	.	0.07	0.01	.	9691	631



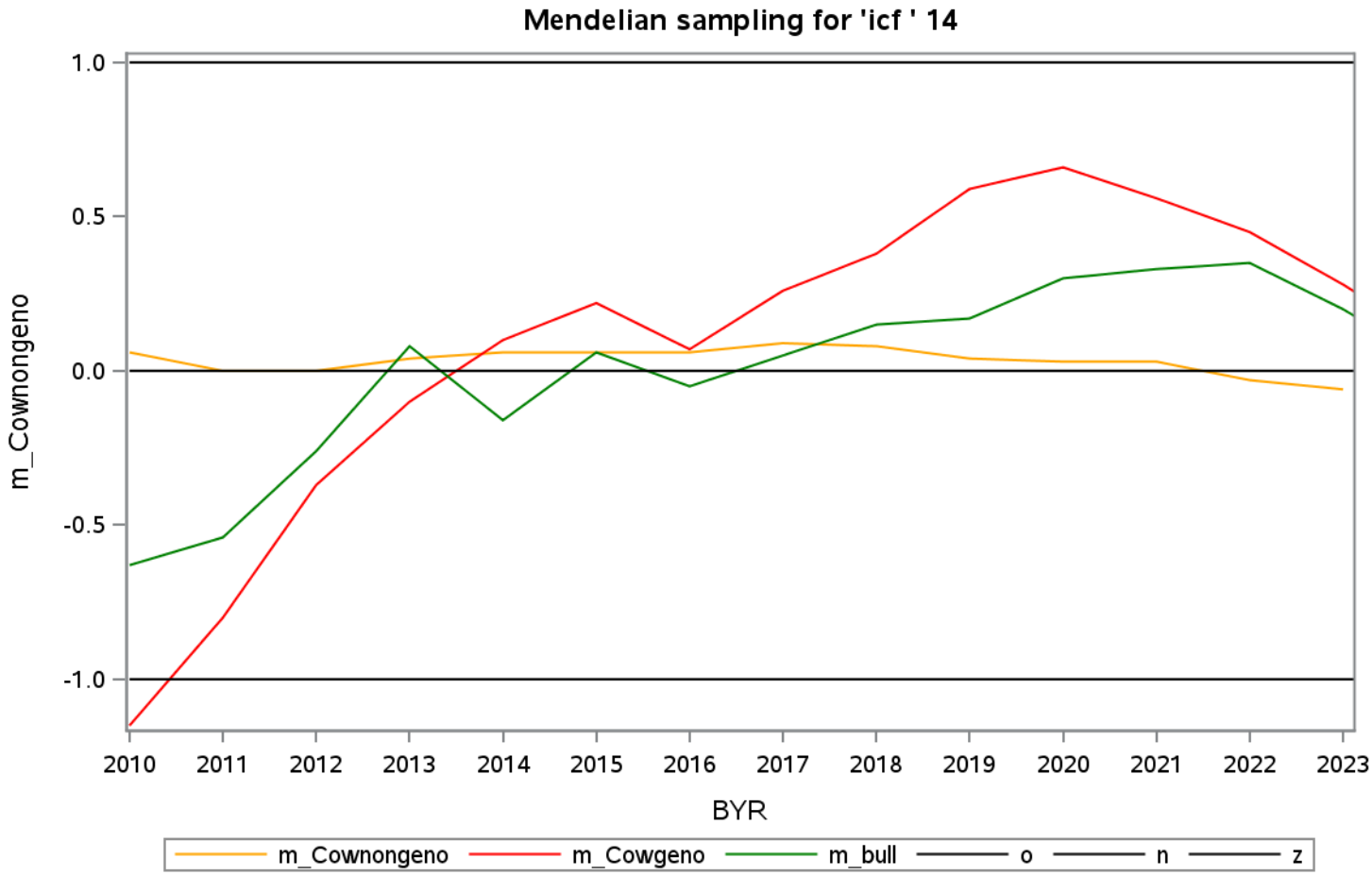
Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	0.00	-1.27	-0.71	190762	1155	720
2	2011	0.02	-0.79	-0.45	190687	2525	1186
3	2012	0.04	-0.36	-0.23	187914	4071	1566
4	2013	0.05	-0.08	0.12	180568	6994	1660
5	2014	0.03	0.08	-0.22	179312	7701	1837
6	2015	0.03	0.19	0.02	167249	10117	1820
7	2016	0.03	0.04	-0.07	159783	16861	2148
8	2017	0.07	0.24	0.03	134471	24932	2285
9	2018	0.10	0.40	0.19	117544	34013	2181
10	2019	0.09	0.67	0.25	108692	39121	2330
11	2020	0.04	0.68	0.30	104404	45550	2170
12	2021	0.03	0.58	0.34	89802	38704	1647
13	2022	0.00	0.49	0.38	50529	38286	1672
14	2023	-0.04	0.30	0.20	79	40006	1855
15	2024	.	0.13	-0.01	.	9691	631



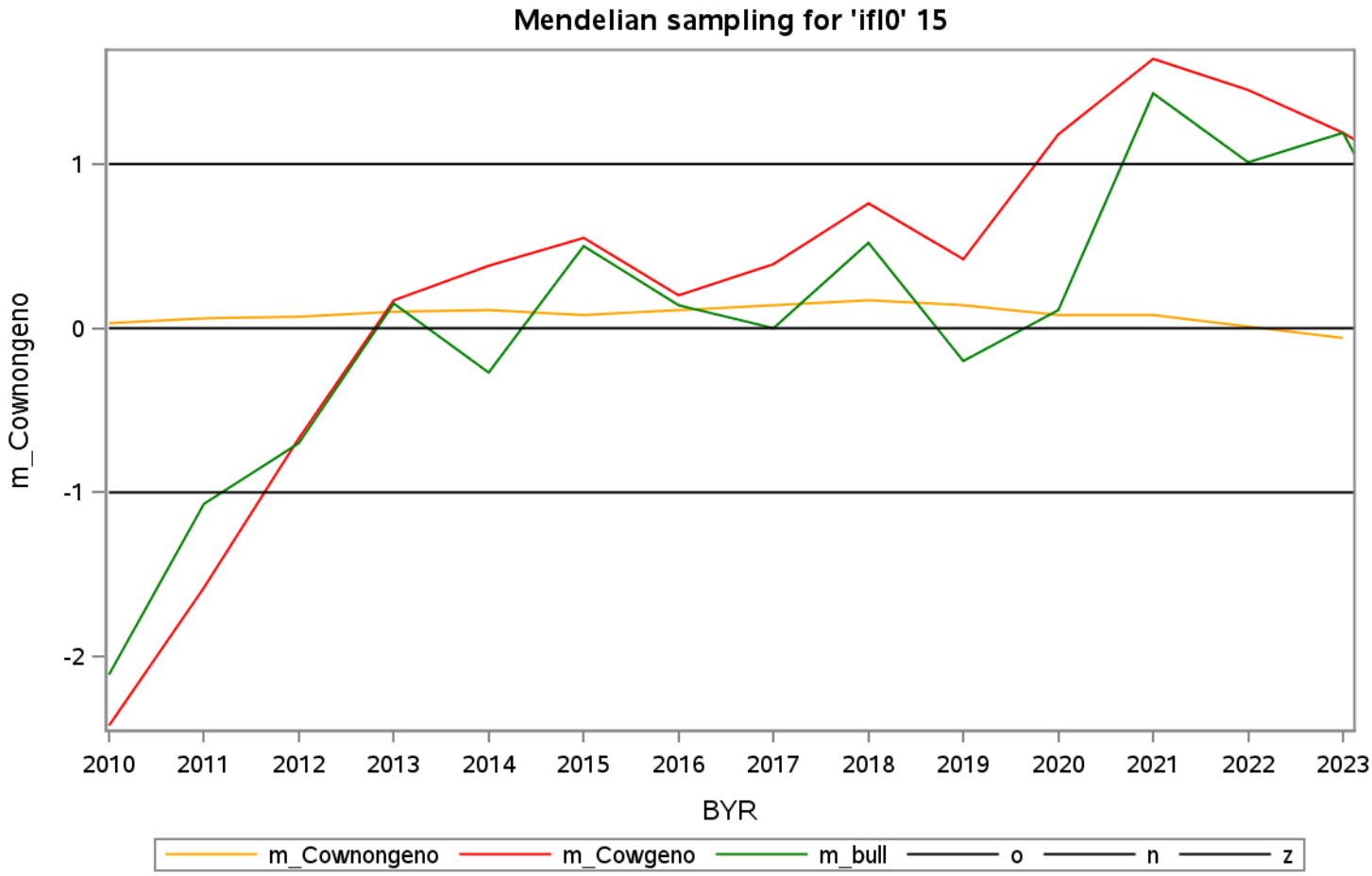
Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	-0.01	-1.21	-0.63	190762	1155	720
2	2011	0.00	-0.74	-0.50	190687	2525	1186
3	2012	0.01	-0.33	-0.17	187914	4071	1566
4	2013	0.02	-0.15	0.01	180568	6994	1660
5	2014	0.05	0.07	-0.18	179312	7701	1837
6	2015	0.04	0.18	-0.03	167249	10117	1820
7	2016	0.05	0.05	-0.05	159783	16861	2148
8	2017	0.06	0.21	-0.01	134471	24932	2285
9	2018	0.06	0.33	0.14	117544	34013	2181
10	2019	0.03	0.58	0.21	108692	39121	2330
11	2020	0.03	0.66	0.27	104404	45550	2170
12	2021	0.06	0.56	0.35	89802	38704	1647
13	2022	-0.02	0.44	0.33	50529	38286	1672
14	2023	-0.02	0.26	0.17	79	40006	1855
15	2024	.	0.03	-0.03	.	9691	631



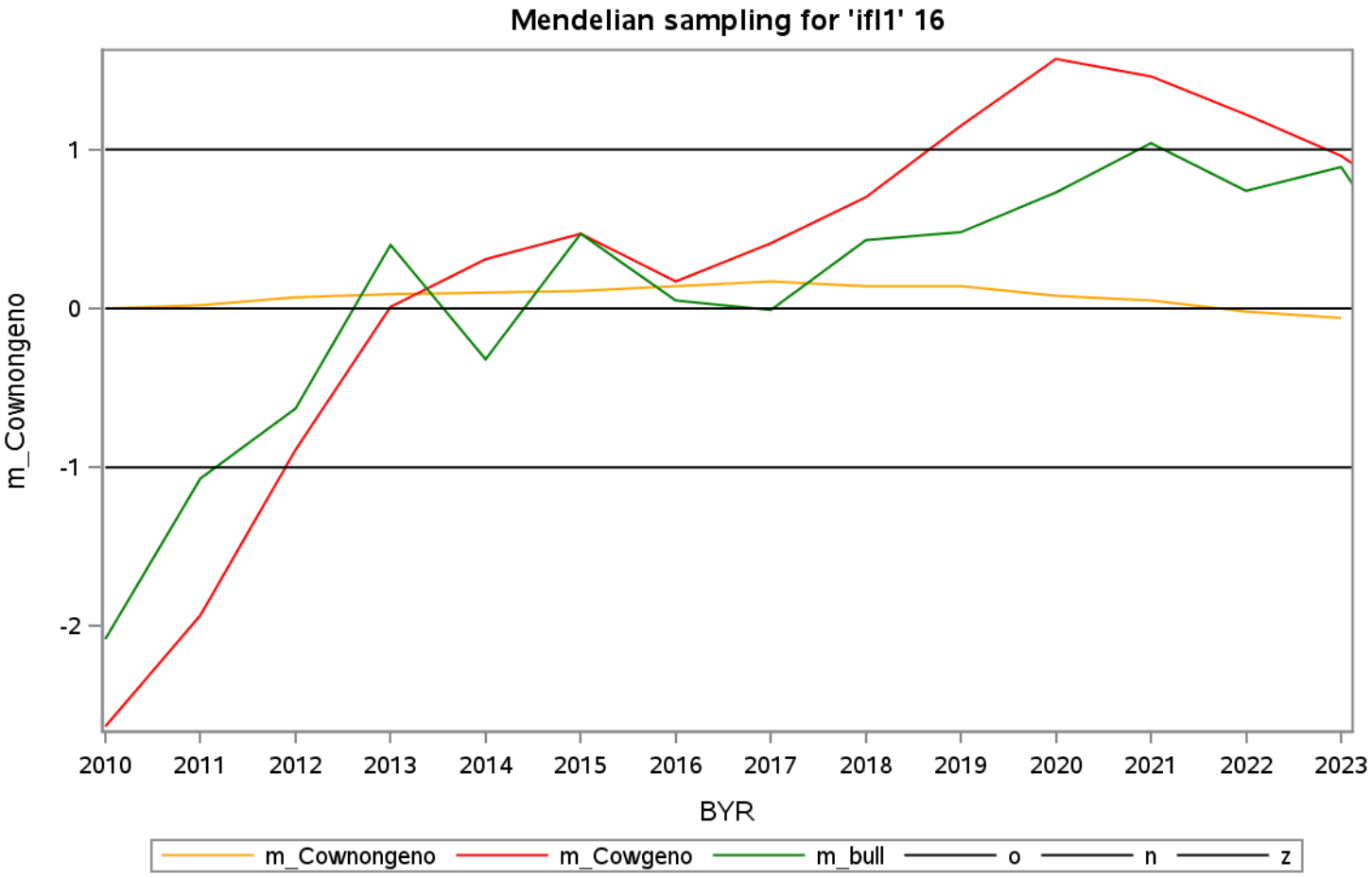
Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	0.06	-1.15	-0.63	190762	1155	720
2	2011	0.00	-0.80	-0.54	190687	2525	1186
3	2012	0.00	-0.37	-0.26	187914	4071	1566
4	2013	0.04	-0.10	0.08	180568	6994	1660
5	2014	0.06	0.10	-0.16	179312	7701	1837
6	2015	0.06	0.22	0.06	167249	10117	1820
7	2016	0.06	0.07	-0.05	159783	16861	2148
8	2017	0.09	0.26	0.05	134471	24932	2285
9	2018	0.08	0.38	0.15	117544	34013	2181
10	2019	0.04	0.59	0.17	108692	39121	2330
11	2020	0.03	0.66	0.30	104404	45550	2170
12	2021	0.03	0.56	0.33	89802	38704	1647
13	2022	-0.03	0.45	0.35	50529	38286	1672
14	2023	-0.06	0.28	0.20	79	40006	1855
15	2024	.	0.09	0.02	.	9691	631



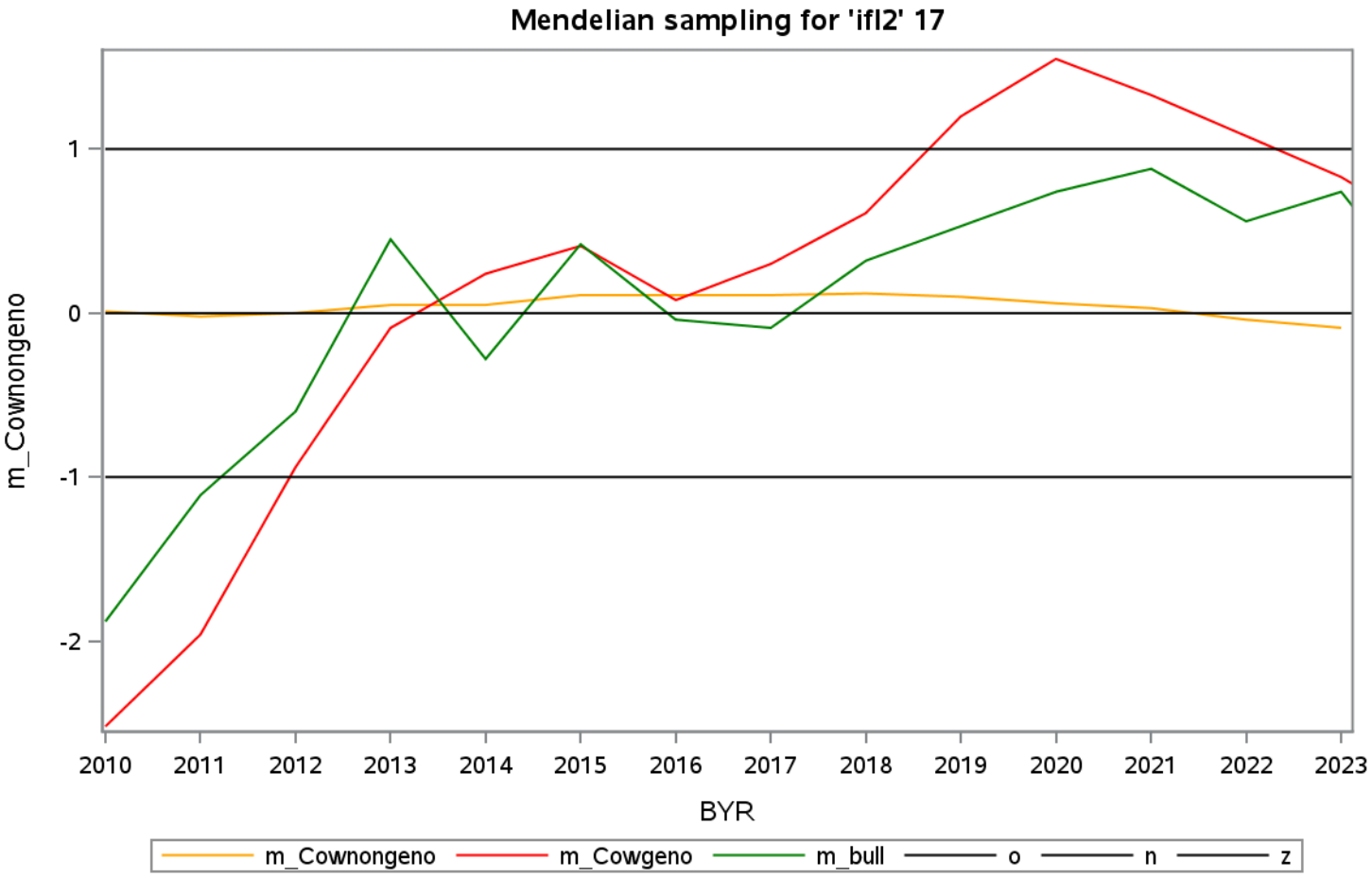
Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	0.03	-2.42	-2.11	190762	1155	720
2	2011	0.06	-1.58	-1.07	190687	2525	1186
3	2012	0.07	-0.67	-0.70	187914	4071	1566
4	2013	0.10	0.17	0.15	180568	6994	1660
5	2014	0.11	0.38	-0.27	179312	7701	1837
6	2015	0.08	0.55	0.50	167249	10117	1820
7	2016	0.11	0.20	0.14	159783	16861	2148
8	2017	0.14	0.39	0.00	134471	24932	2285
9	2018	0.17	0.76	0.52	117544	34013	2181
10	2019	0.14	0.42	-0.20	108692	39121	2330
11	2020	0.08	1.18	0.11	104404	45550	2170
12	2021	0.08	1.64	1.43	89802	38704	1647
13	2022	0.01	1.45	1.01	50529	38286	1672
14	2023	-0.06	1.19	1.19	79	40006	1855
15	2024	.	0.84	0.10	.	9691	631



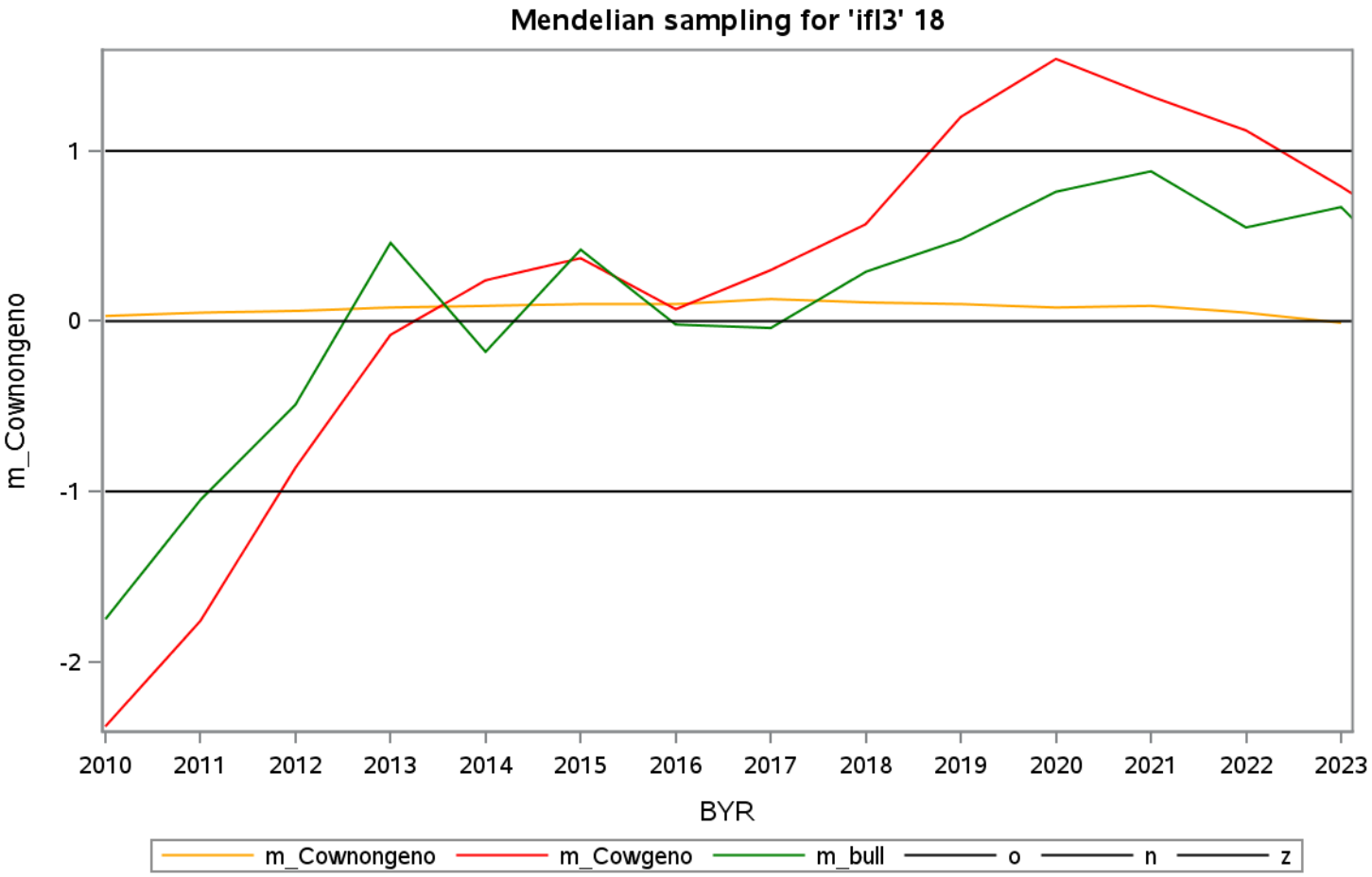
Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	0.00	-2.63	-2.08	190762	1155	720
2	2011	0.02	-1.93	-1.07	190687	2525	1186
3	2012	0.07	-0.89	-0.63	187914	4071	1566
4	2013	0.09	0.01	0.40	180568	6994	1660
5	2014	0.10	0.31	-0.32	179312	7701	1837
6	2015	0.11	0.47	0.47	167249	10117	1820
7	2016	0.14	0.17	0.05	159783	16861	2148
8	2017	0.17	0.41	-0.01	134471	24932	2285
9	2018	0.14	0.70	0.43	117544	34013	2181
10	2019	0.14	1.15	0.48	108692	39121	2330
11	2020	0.08	1.57	0.73	104404	45550	2170
12	2021	0.05	1.46	1.04	89802	38704	1647
13	2022	-0.02	1.22	0.74	50529	38286	1672
14	2023	-0.06	0.96	0.89	79	40006	1855
15	2024	.	0.56	0.00	.	9691	631



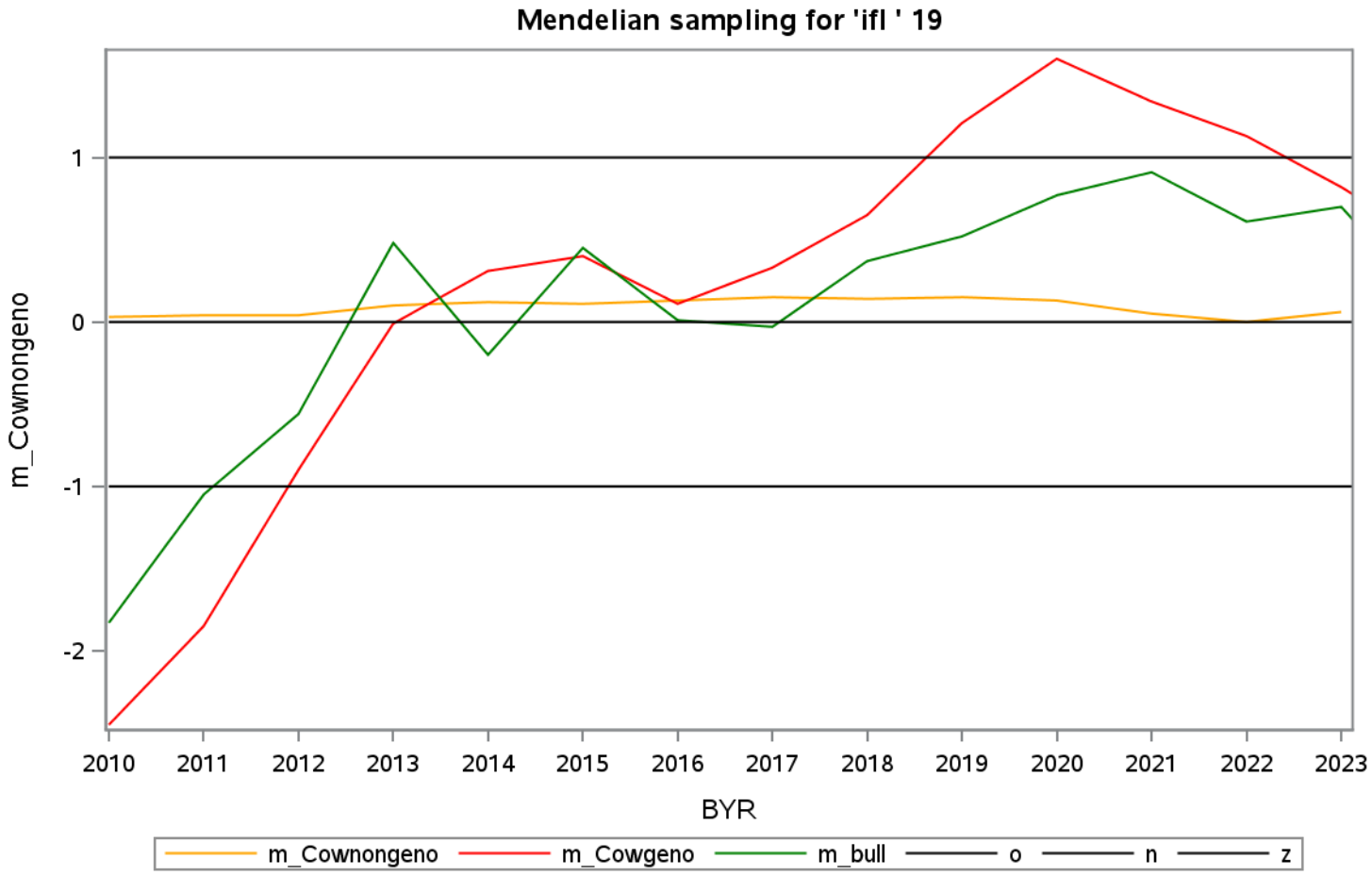
Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	0.01	-2.52	-1.88	190762	1155	720
2	2011	-0.02	-1.96	-1.11	190687	2525	1186
3	2012	0.00	-0.94	-0.60	187914	4071	1566
4	2013	0.05	-0.09	0.45	180568	6994	1660
5	2014	0.05	0.24	-0.28	179312	7701	1837
6	2015	0.11	0.41	0.42	167249	10117	1820
7	2016	0.11	0.08	-0.04	159783	16861	2148
8	2017	0.11	0.30	-0.09	134471	24932	2285
9	2018	0.12	0.61	0.32	117544	34013	2181
10	2019	0.10	1.20	0.53	108692	39121	2330
11	2020	0.06	1.55	0.74	104404	45550	2170
12	2021	0.03	1.33	0.88	89802	38704	1647
13	2022	-0.04	1.08	0.56	50529	38286	1672
14	2023	-0.09	0.83	0.74	79	40006	1855
15	2024	.	0.48	0.01	.	9691	631



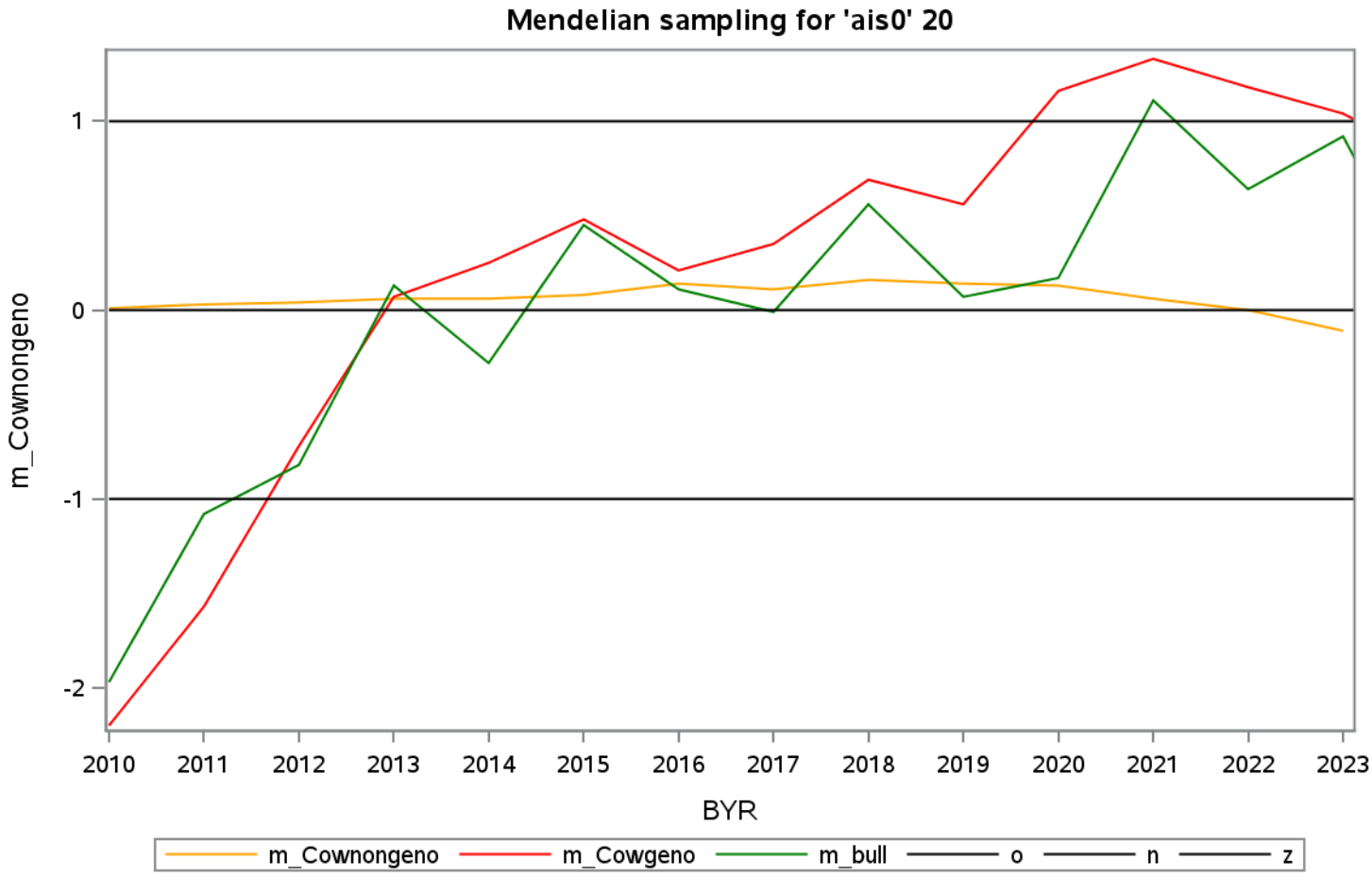
Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	0.03	-2.38	-1.75	190762	1155	720
2	2011	0.05	-1.76	-1.05	190687	2525	1186
3	2012	0.06	-0.86	-0.49	187914	4071	1566
4	2013	0.08	-0.08	0.46	180568	6994	1660
5	2014	0.09	0.24	-0.18	179312	7701	1837
6	2015	0.10	0.37	0.42	167249	10117	1820
7	2016	0.10	0.07	-0.02	159783	16861	2148
8	2017	0.13	0.30	-0.04	134471	24932	2285
9	2018	0.11	0.57	0.29	117544	34013	2181
10	2019	0.10	1.20	0.48	108692	39121	2330
11	2020	0.08	1.54	0.76	104404	45550	2170
12	2021	0.09	1.32	0.88	89802	38704	1647
13	2022	0.05	1.12	0.55	50529	38286	1672
14	2023	-0.01	0.79	0.67	79	40006	1855
15	2024	.	0.44	0.11	.	9691	631



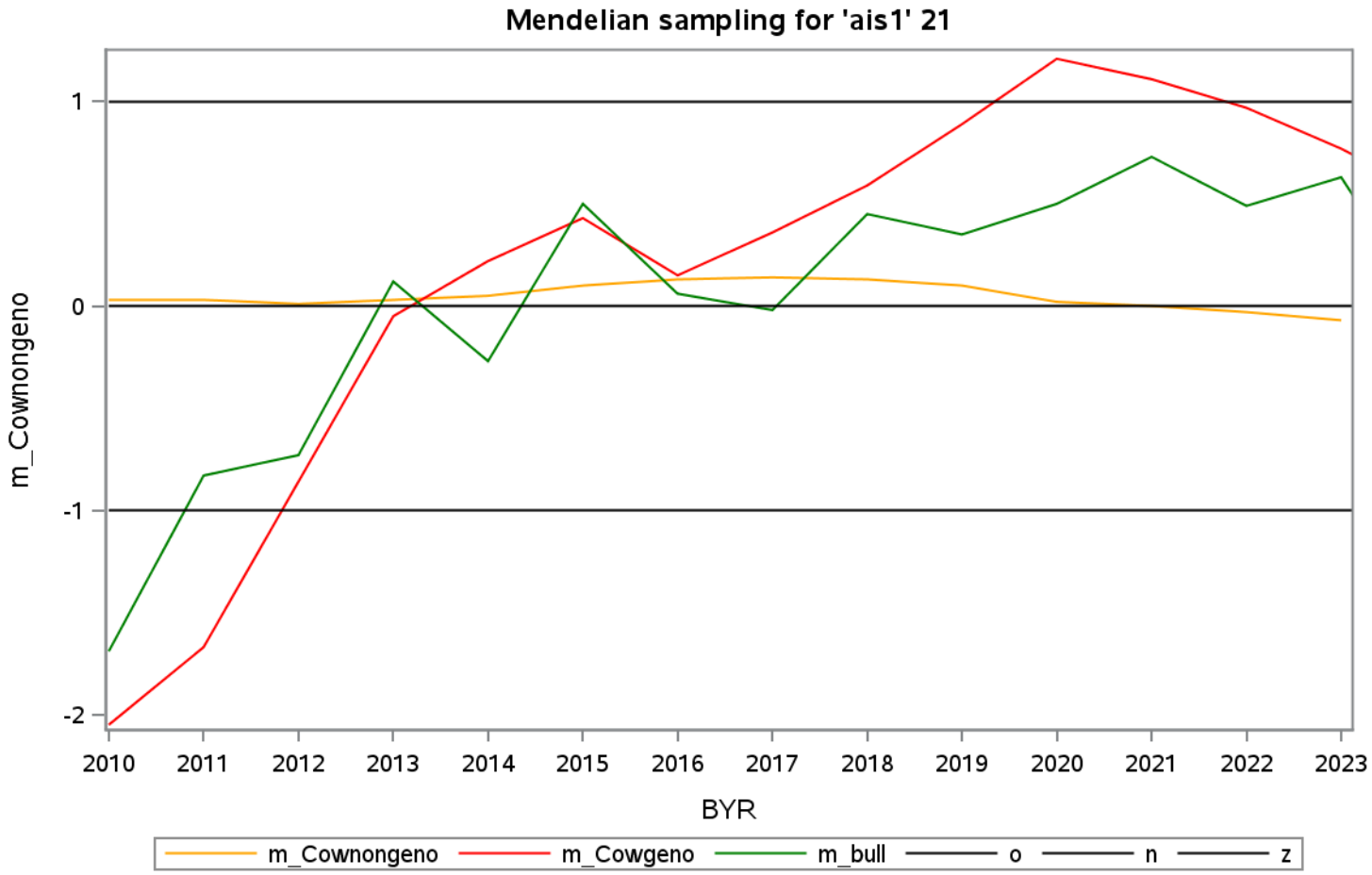
Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	0.03	-2.45	-1.83	190762	1155	720
2	2011	0.04	-1.85	-1.05	190687	2525	1186
3	2012	0.04	-0.90	-0.56	187914	4071	1566
4	2013	0.10	-0.01	0.48	180568	6994	1660
5	2014	0.12	0.31	-0.20	179312	7701	1837
6	2015	0.11	0.40	0.45	167249	10117	1820
7	2016	0.13	0.11	0.01	159783	16861	2148
8	2017	0.15	0.33	-0.03	134471	24932	2285
9	2018	0.14	0.65	0.37	117544	34013	2181
10	2019	0.15	1.21	0.52	108692	39121	2330
11	2020	0.13	1.60	0.77	104404	45550	2170
12	2021	0.05	1.34	0.91	89802	38704	1647
13	2022	0.00	1.13	0.61	50529	38286	1672
14	2023	0.06	0.82	0.70	79	40006	1855
15	2024	.	0.46	0.06	.	9691	631



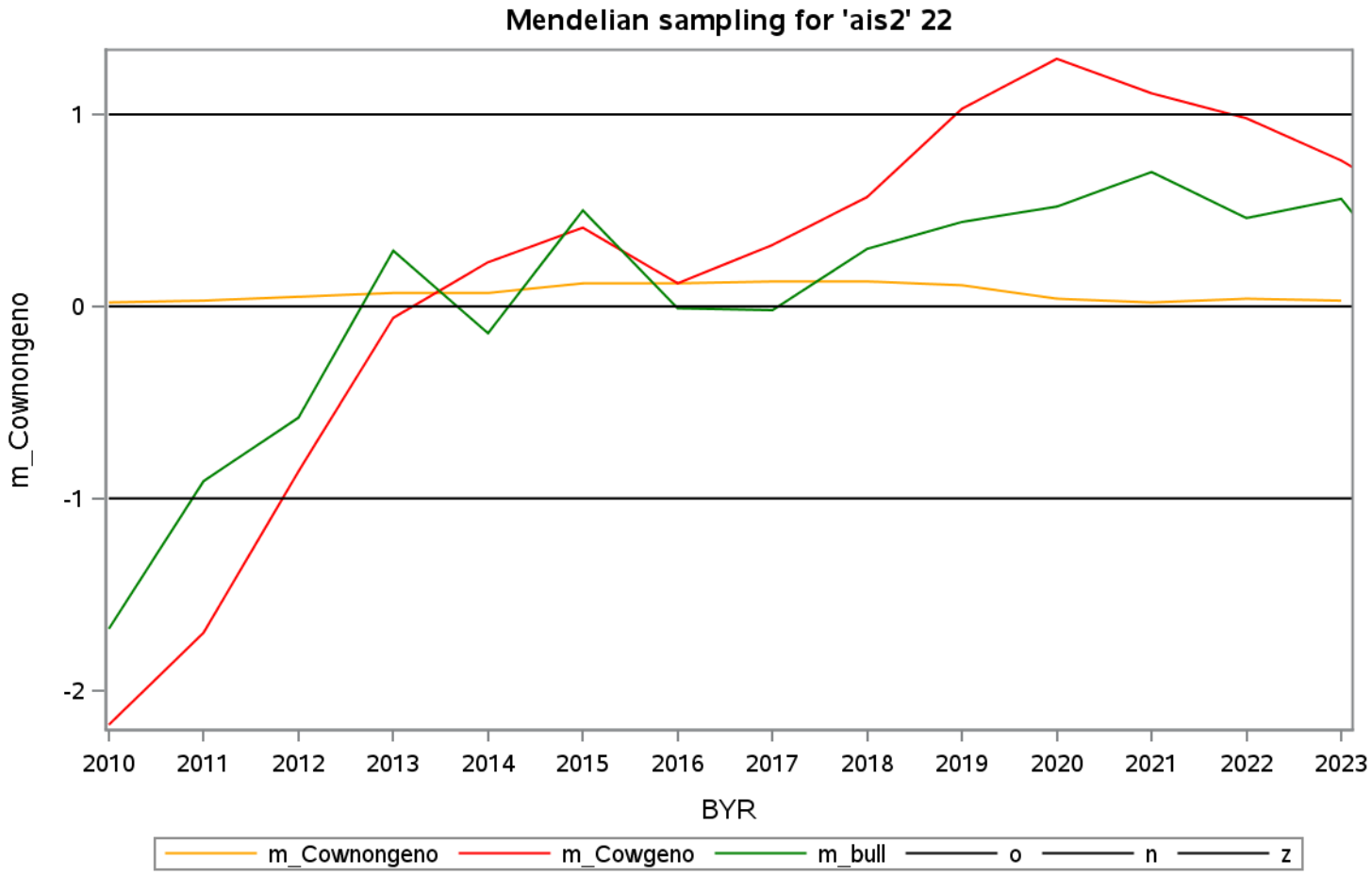
Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	0.01	-2.20	-1.97	190762	1155	720
2	2011	0.03	-1.57	-1.08	190687	2525	1186
3	2012	0.04	-0.72	-0.82	187914	4071	1566
4	2013	0.06	0.07	0.13	180568	6994	1660
5	2014	0.06	0.25	-0.28	179312	7701	1837
6	2015	0.08	0.48	0.45	167249	10117	1820
7	2016	0.14	0.21	0.11	159783	16861	2148
8	2017	0.11	0.35	-0.01	134471	24932	2285
9	2018	0.16	0.69	0.56	117544	34013	2181
10	2019	0.14	0.56	0.07	108692	39121	2330
11	2020	0.13	1.16	0.17	104404	45550	2170
12	2021	0.06	1.33	1.11	89802	38704	1647
13	2022	0.00	1.18	0.64	50529	38286	1672
14	2023	-0.11	1.04	0.92	79	40006	1855
15	2024	.	0.78	-0.03	.	9691	631



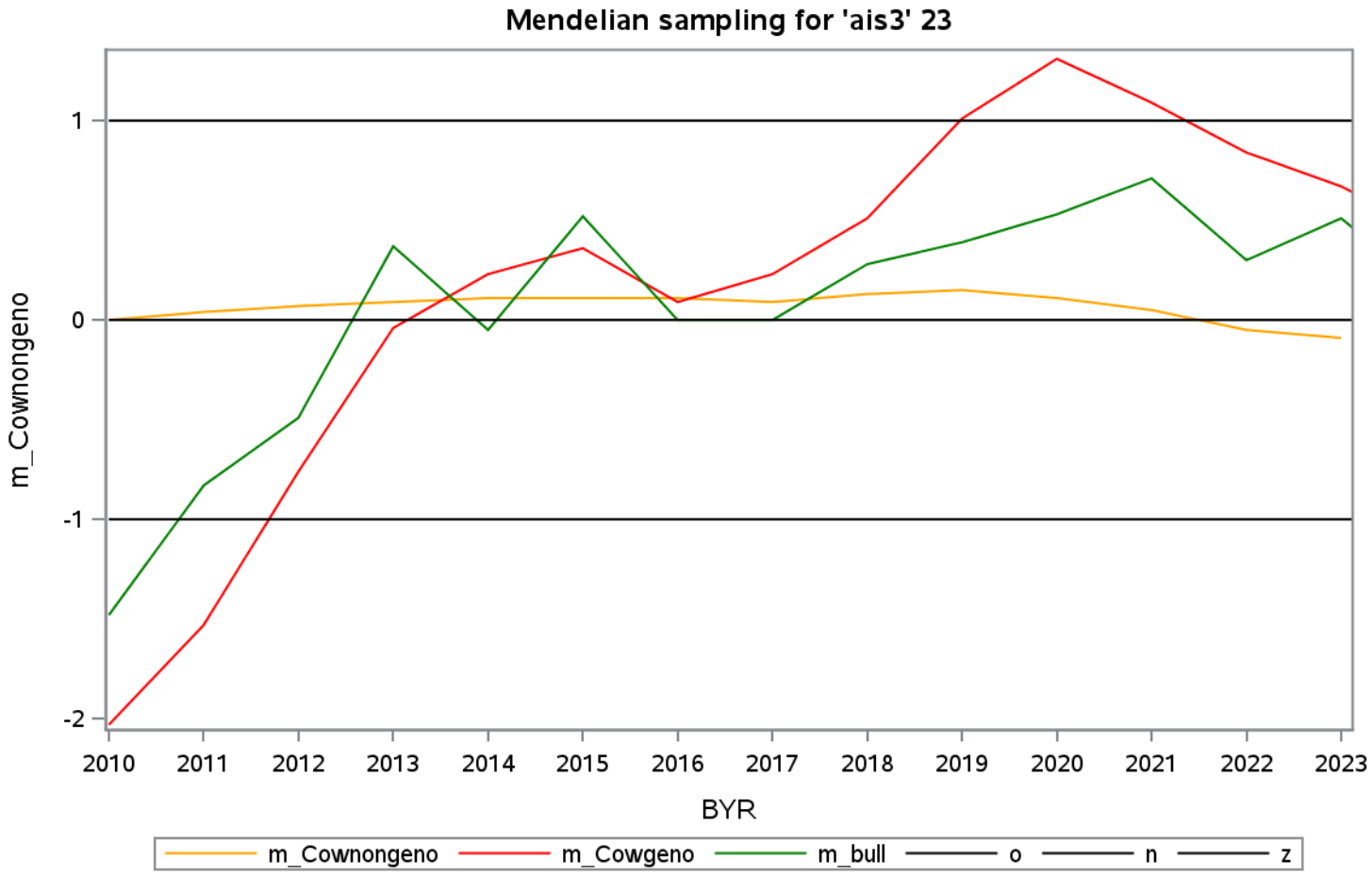
Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	0.03	-2.05	-1.69	190762	1155	720
2	2011	0.03	-1.67	-0.83	190687	2525	1186
3	2012	0.01	-0.86	-0.73	187914	4071	1566
4	2013	0.03	-0.05	0.12	180568	6994	1660
5	2014	0.05	0.22	-0.27	179312	7701	1837
6	2015	0.10	0.43	0.50	167249	10117	1820
7	2016	0.13	0.15	0.06	159783	16861	2148
8	2017	0.14	0.36	-0.02	134471	24932	2285
9	2018	0.13	0.59	0.45	117544	34013	2181
10	2019	0.10	0.89	0.35	108692	39121	2330
11	2020	0.02	1.21	0.50	104404	45550	2170
12	2021	0.00	1.11	0.73	89802	38704	1647
13	2022	-0.03	0.97	0.49	50529	38286	1672
14	2023	-0.07	0.77	0.63	79	40006	1855
15	2024	.	0.53	-0.09	.	9691	631



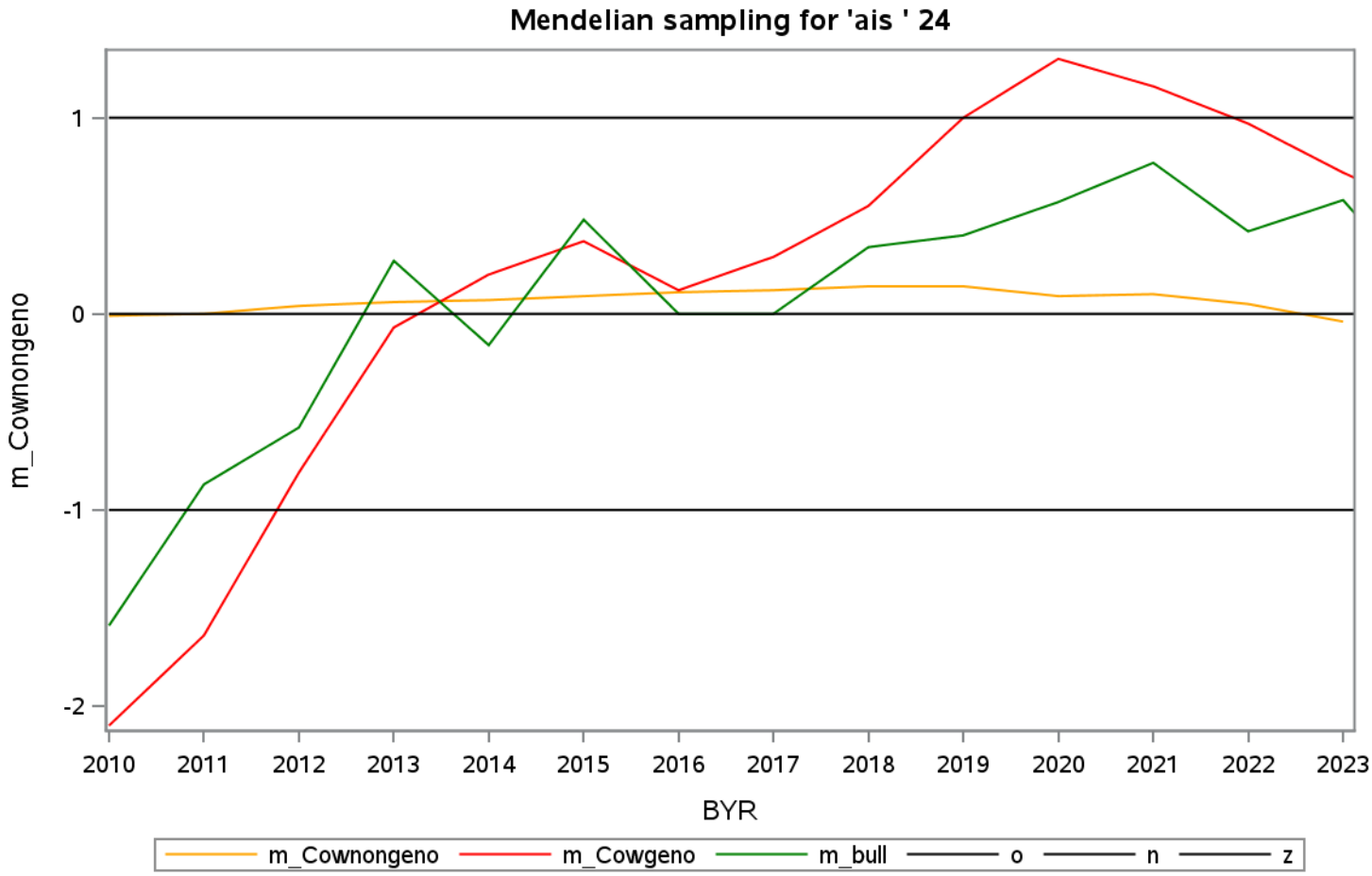
Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	0.02	-2.18	-1.68	190762	1155	720
2	2011	0.03	-1.70	-0.91	190687	2525	1186
3	2012	0.05	-0.86	-0.58	187914	4071	1566
4	2013	0.07	-0.06	0.29	180568	6994	1660
5	2014	0.07	0.23	-0.14	179312	7701	1837
6	2015	0.12	0.41	0.50	167249	10117	1820
7	2016	0.12	0.12	-0.01	159783	16861	2148
8	2017	0.13	0.32	-0.02	134471	24932	2285
9	2018	0.13	0.57	0.30	117544	34013	2181
10	2019	0.11	1.03	0.44	108692	39121	2330
11	2020	0.04	1.29	0.52	104404	45550	2170
12	2021	0.02	1.11	0.70	89802	38704	1647
13	2022	0.04	0.98	0.46	50529	38286	1672
14	2023	0.03	0.76	0.56	79	40006	1855
15	2024	.	0.47	-0.05	.	9691	631



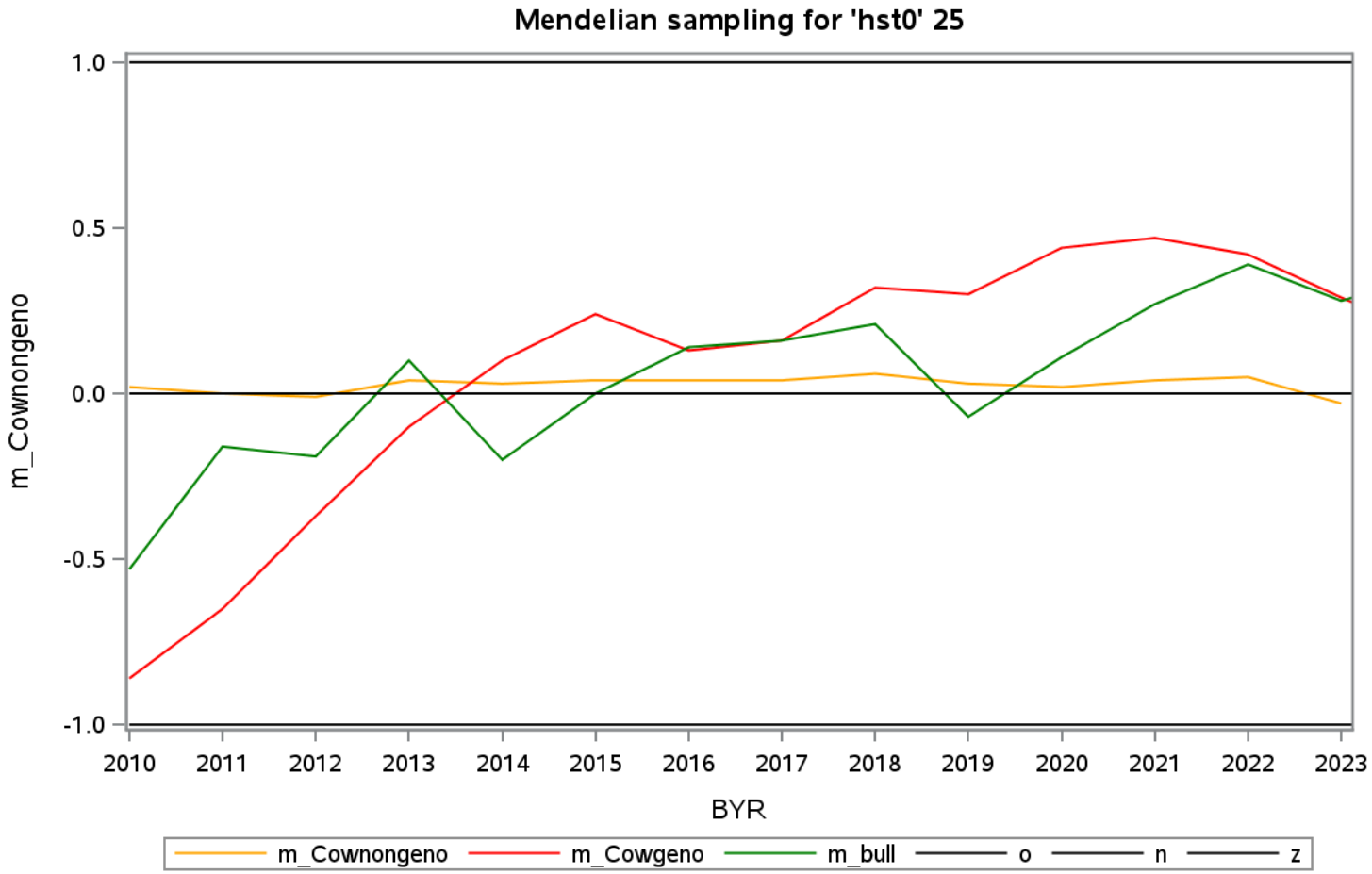
Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	0.00	-2.03	-1.48	190762	1155	720
2	2011	0.04	-1.53	-0.83	190687	2525	1186
3	2012	0.07	-0.76	-0.49	187914	4071	1566
4	2013	0.09	-0.04	0.37	180568	6994	1660
5	2014	0.11	0.23	-0.05	179312	7701	1837
6	2015	0.11	0.36	0.52	167249	10117	1820
7	2016	0.11	0.09	0.00	159783	16861	2148
8	2017	0.09	0.23	0.00	134471	24932	2285
9	2018	0.13	0.51	0.28	117544	34013	2181
10	2019	0.15	1.01	0.39	108692	39121	2330
11	2020	0.11	1.31	0.53	104404	45550	2170
12	2021	0.05	1.09	0.71	89802	38704	1647
13	2022	-0.05	0.84	0.30	50529	38286	1672
14	2023	-0.09	0.67	0.51	79	40006	1855
15	2024	.	0.43	0.12	.	9691	631



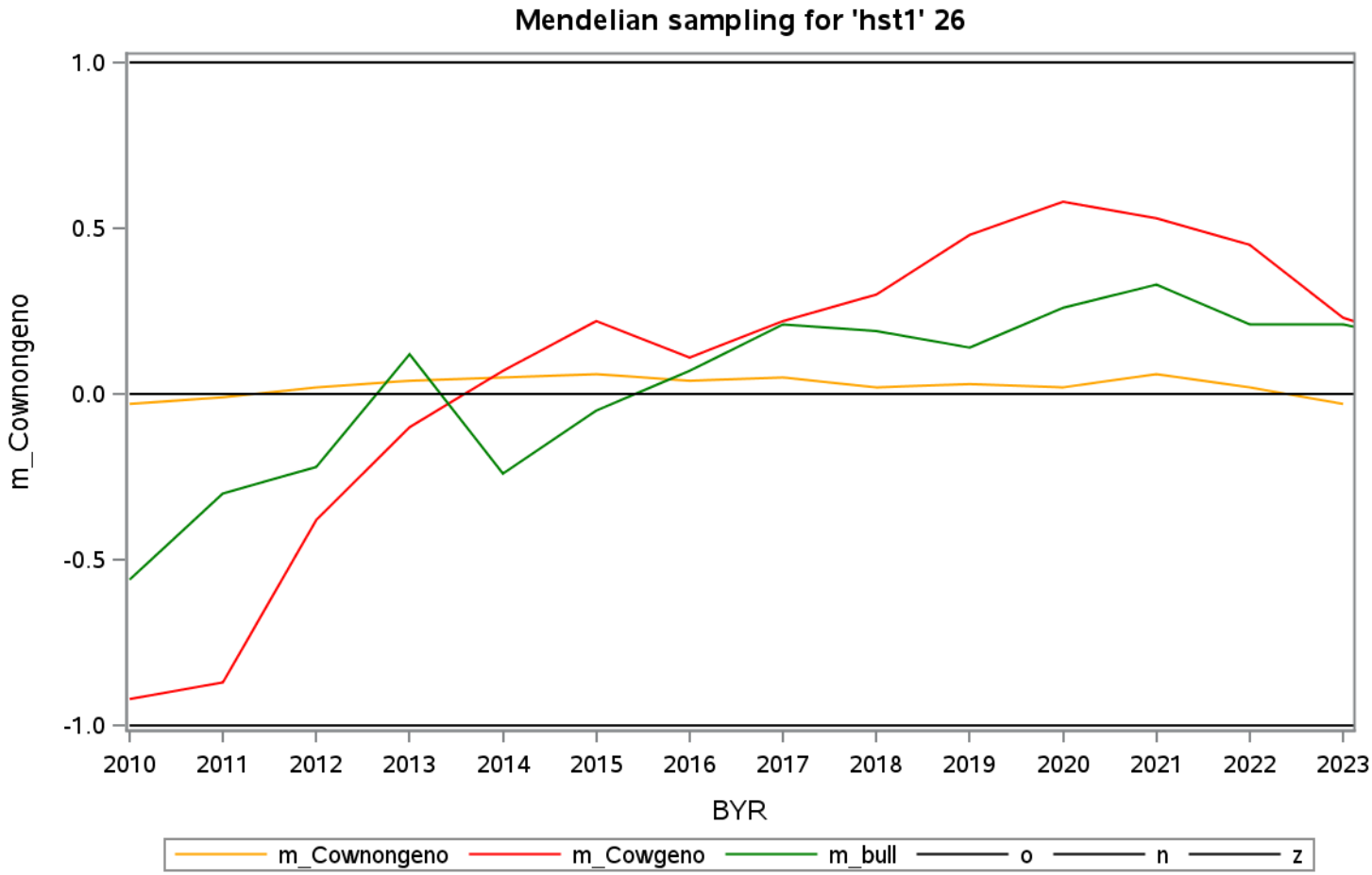
Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	-0.01	-2.10	-1.59	190762	1155	720
2	2011	0.00	-1.64	-0.87	190687	2525	1186
3	2012	0.04	-0.81	-0.58	187914	4071	1566
4	2013	0.06	-0.07	0.27	180568	6994	1660
5	2014	0.07	0.20	-0.16	179312	7701	1837
6	2015	0.09	0.37	0.48	167249	10117	1820
7	2016	0.11	0.12	0.00	159783	16861	2148
8	2017	0.12	0.29	0.00	134471	24932	2285
9	2018	0.14	0.55	0.34	117544	34013	2181
10	2019	0.14	1.00	0.40	108692	39121	2330
11	2020	0.09	1.30	0.57	104404	45550	2170
12	2021	0.10	1.16	0.77	89802	38704	1647
13	2022	0.05	0.97	0.42	50529	38286	1672
14	2023	-0.04	0.72	0.58	79	40006	1855
15	2024	.	0.50	0.03	.	9691	631



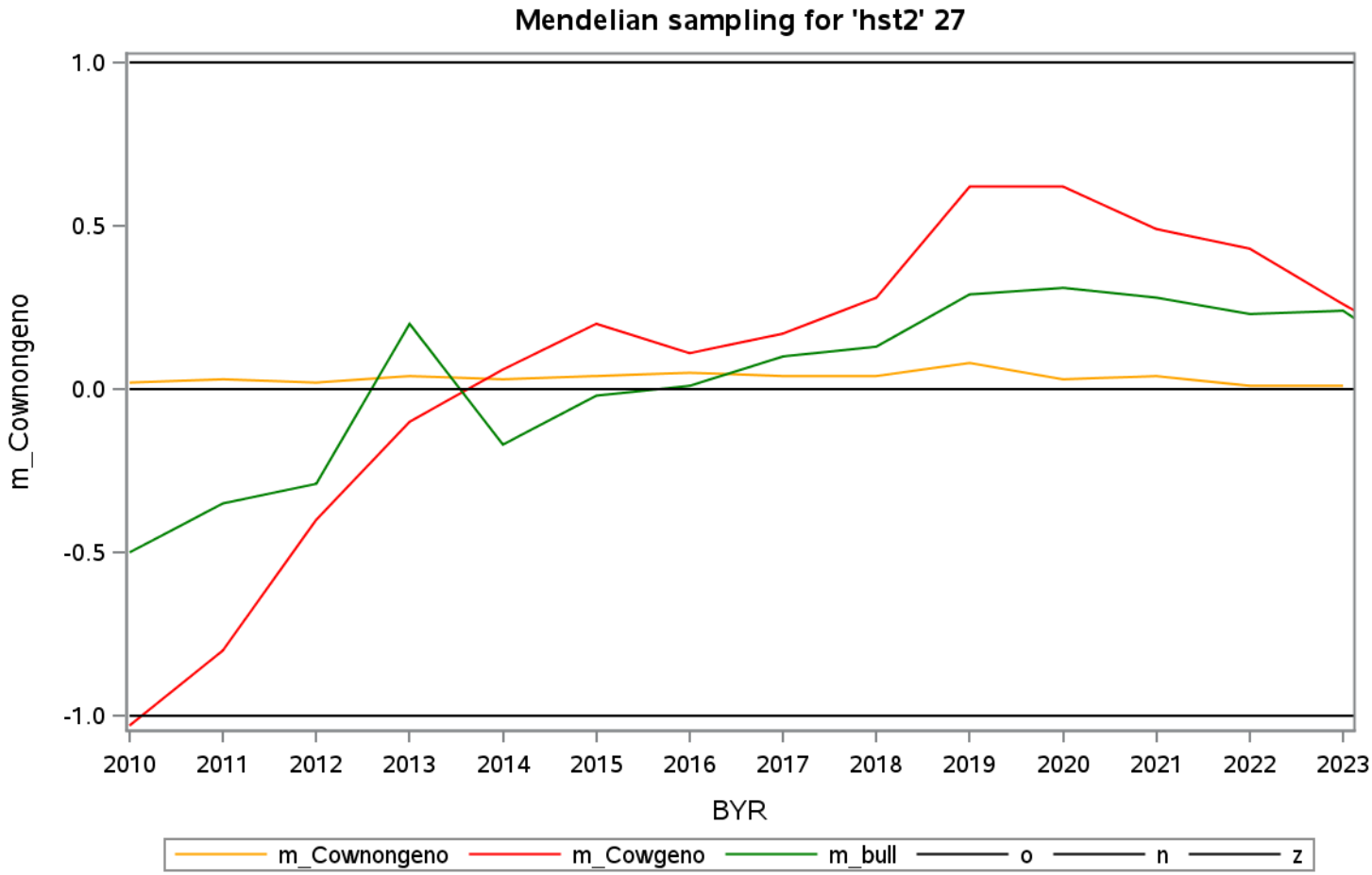
Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	0.02	-0.86	-0.53	190762	1155	720
2	2011	0.00	-0.65	-0.16	190687	2525	1186
3	2012	-0.01	-0.37	-0.19	187914	4071	1566
4	2013	0.04	-0.10	0.10	180568	6994	1660
5	2014	0.03	0.10	-0.20	179312	7701	1837
6	2015	0.04	0.24	0.00	167249	10117	1820
7	2016	0.04	0.13	0.14	159783	16861	2148
8	2017	0.04	0.16	0.16	134471	24932	2285
9	2018	0.06	0.32	0.21	117544	34013	2181
10	2019	0.03	0.30	-0.07	108692	39121	2330
11	2020	0.02	0.44	0.11	104404	45550	2170
12	2021	0.04	0.47	0.27	89802	38704	1647
13	2022	0.05	0.42	0.39	50529	38286	1672
14	2023	-0.03	0.29	0.28	79	40006	1855
15	2024	.	0.17	0.36	.	9691	631



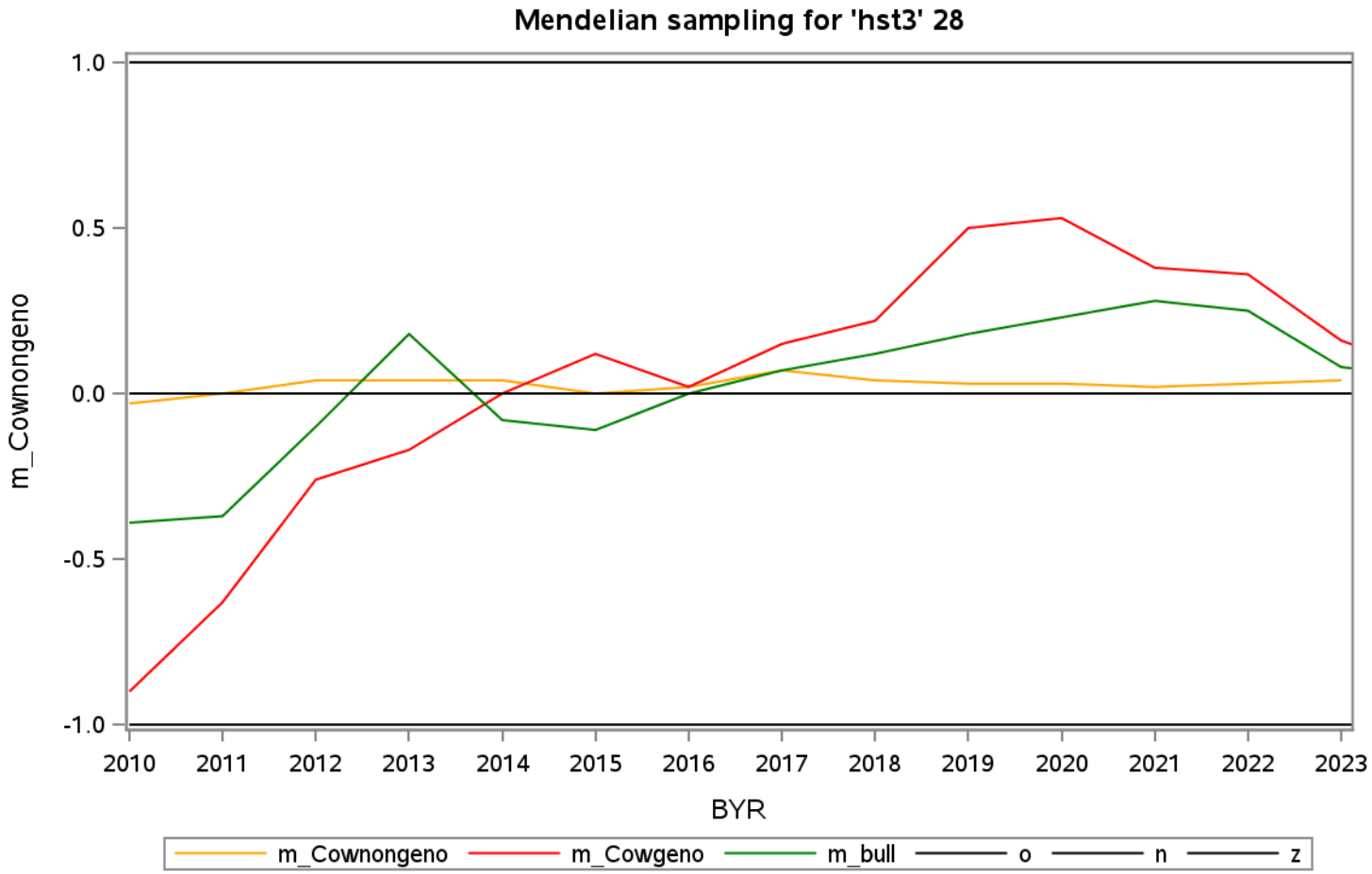
Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	-0.03	-0.92	-0.56	190762	1155	720
2	2011	-0.01	-0.87	-0.30	190687	2525	1186
3	2012	0.02	-0.38	-0.22	187914	4071	1566
4	2013	0.04	-0.10	0.12	180568	6994	1660
5	2014	0.05	0.07	-0.24	179312	7701	1837
6	2015	0.06	0.22	-0.05	167249	10117	1820
7	2016	0.04	0.11	0.07	159783	16861	2148
8	2017	0.05	0.22	0.21	134471	24932	2285
9	2018	0.02	0.30	0.19	117544	34013	2181
10	2019	0.03	0.48	0.14	108692	39121	2330
11	2020	0.02	0.58	0.26	104404	45550	2170
12	2021	0.06	0.53	0.33	89802	38704	1647
13	2022	0.02	0.45	0.21	50529	38286	1672
14	2023	-0.03	0.23	0.21	79	40006	1855
15	2024	.	0.14	0.15	.	9691	631



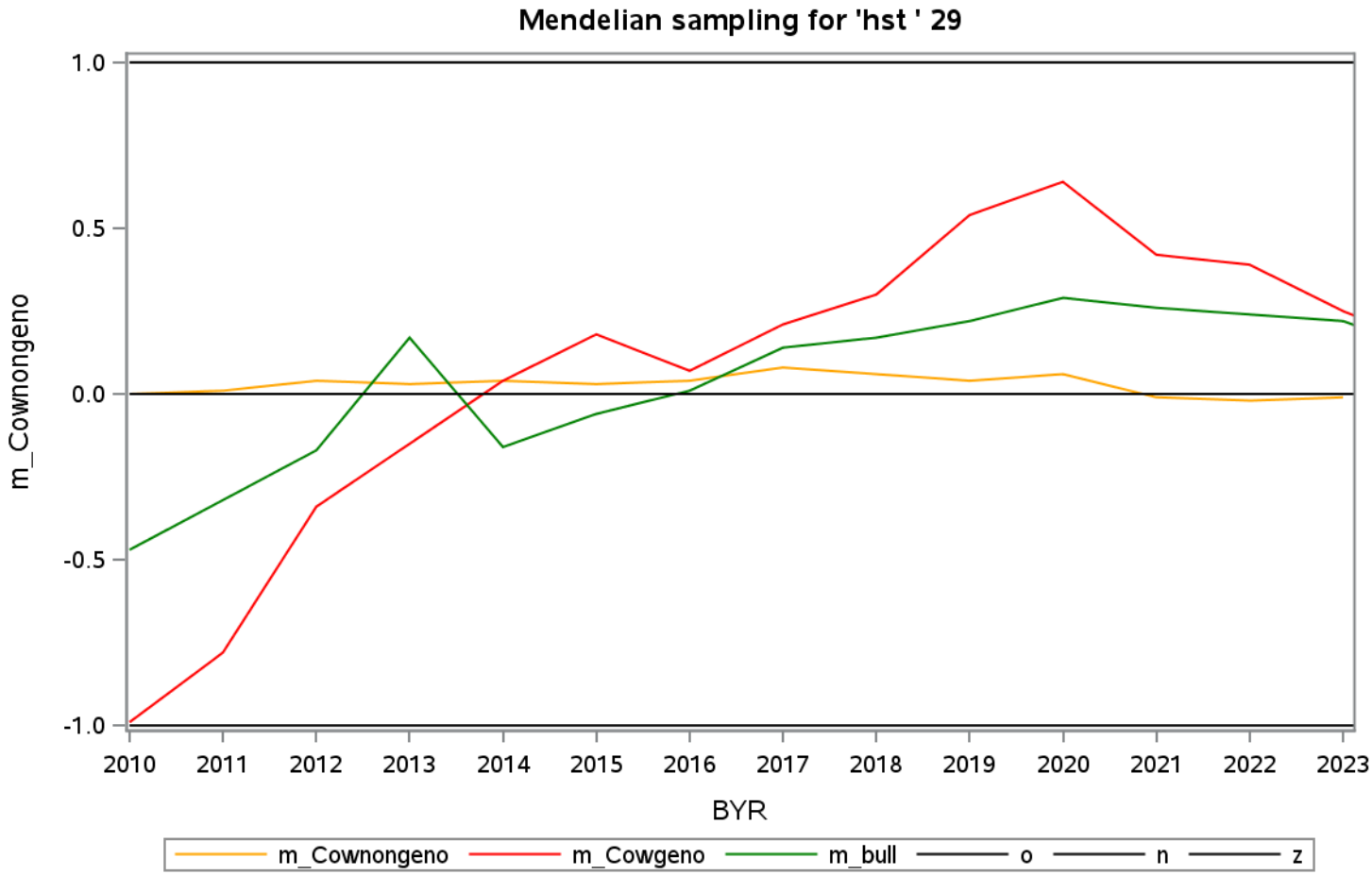
Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	0.02	-1.03	-0.50	190762	1155	720
2	2011	0.03	-0.80	-0.35	190687	2525	1186
3	2012	0.02	-0.40	-0.29	187914	4071	1566
4	2013	0.04	-0.10	0.20	180568	6994	1660
5	2014	0.03	0.06	-0.17	179312	7701	1837
6	2015	0.04	0.20	-0.02	167249	10117	1820
7	2016	0.05	0.11	0.01	159783	16861	2148
8	2017	0.04	0.17	0.10	134471	24932	2285
9	2018	0.04	0.28	0.13	117544	34013	2181
10	2019	0.08	0.62	0.29	108692	39121	2330
11	2020	0.03	0.62	0.31	104404	45550	2170
12	2021	0.04	0.49	0.28	89802	38704	1647
13	2022	0.01	0.43	0.23	50529	38286	1672
14	2023	0.01	0.26	0.24	79	40006	1855
15	2024	.	0.10	0.05	.	9691	631



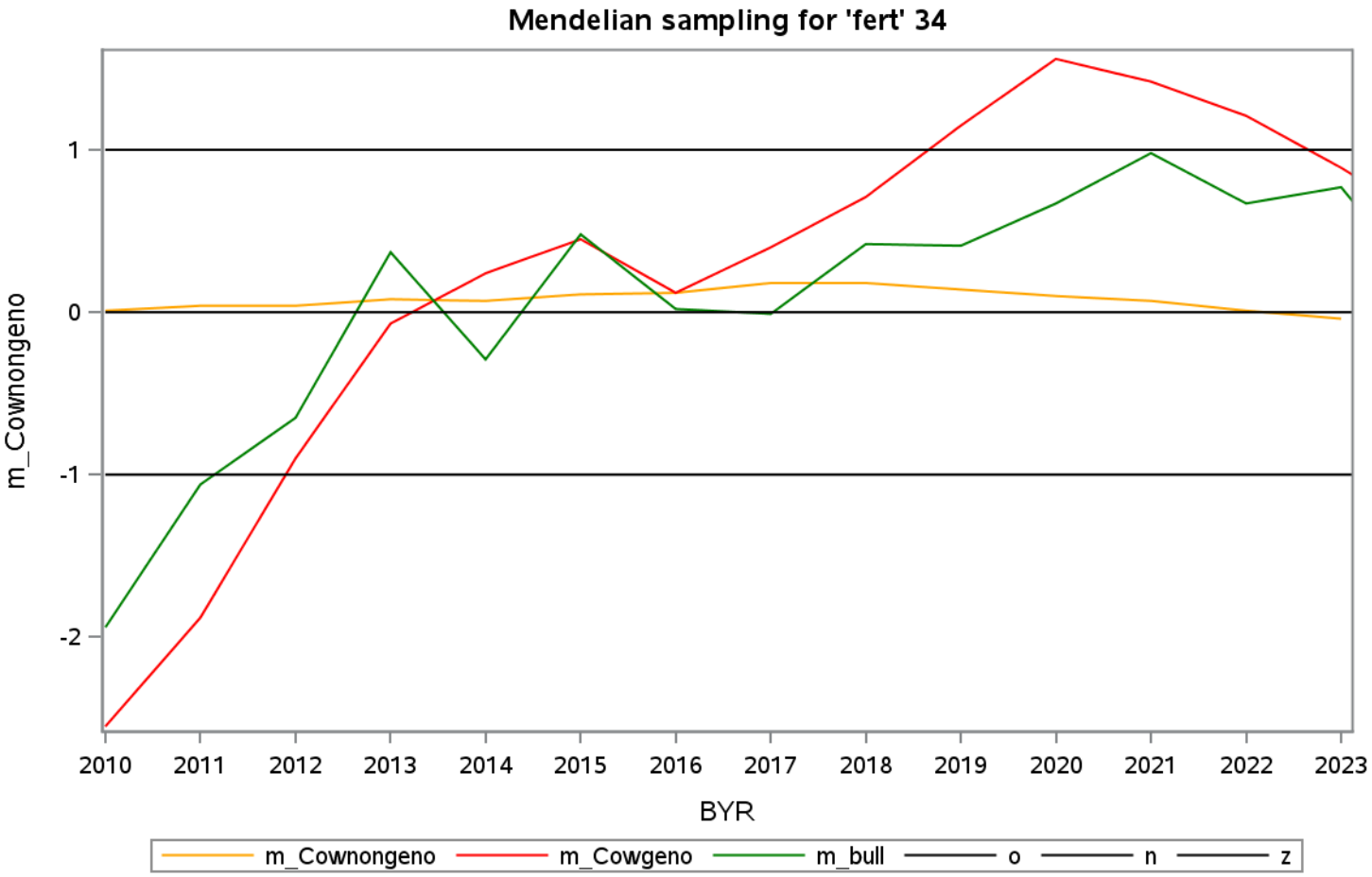
Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	-0.03	-0.90	-0.39	190762	1155	720
2	2011	0.00	-0.63	-0.37	190687	2525	1186
3	2012	0.04	-0.26	-0.10	187914	4071	1566
4	2013	0.04	-0.17	0.18	180568	6994	1660
5	2014	0.04	0.00	-0.08	179312	7701	1837
6	2015	0.00	0.12	-0.11	167249	10117	1820
7	2016	0.02	0.02	0.00	159783	16861	2148
8	2017	0.07	0.15	0.07	134471	24932	2285
9	2018	0.04	0.22	0.12	117544	34013	2181
10	2019	0.03	0.50	0.18	108692	39121	2330
11	2020	0.03	0.53	0.23	104404	45550	2170
12	2021	0.02	0.38	0.28	89802	38704	1647
13	2022	0.03	0.36	0.25	50529	38286	1672
14	2023	0.04	0.16	0.08	79	40006	1855
15	2024	.	0.06	0.05	.	9691	631



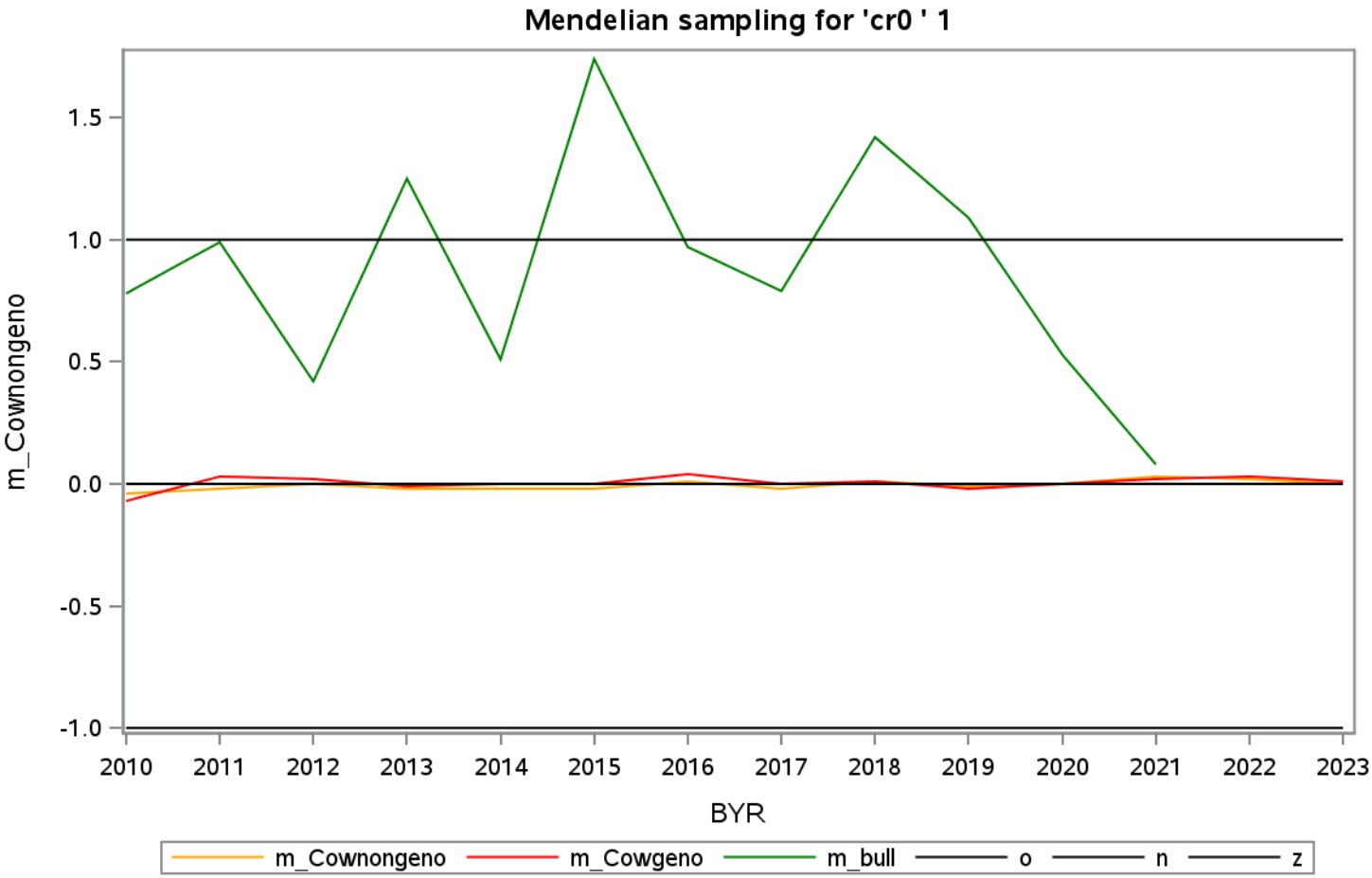
Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	0.00	-0.99	-0.47	190762	1155	720
2	2011	0.01	-0.78	-0.32	190687	2525	1186
3	2012	0.04	-0.34	-0.17	187914	4071	1566
4	2013	0.03	-0.15	0.17	180568	6994	1660
5	2014	0.04	0.04	-0.16	179312	7701	1837
6	2015	0.03	0.18	-0.06	167249	10117	1820
7	2016	0.04	0.07	0.01	159783	16861	2148
8	2017	0.08	0.21	0.14	134471	24932	2285
9	2018	0.06	0.30	0.17	117544	34013	2181
10	2019	0.04	0.54	0.22	108692	39121	2330
11	2020	0.06	0.64	0.29	104404	45550	2170
12	2021	-0.01	0.42	0.26	89802	38704	1647
13	2022	-0.02	0.39	0.24	50529	38286	1672
14	2023	-0.01	0.25	0.22	79	40006	1855
15	2024	.	0.14	0.12	.	9691	631



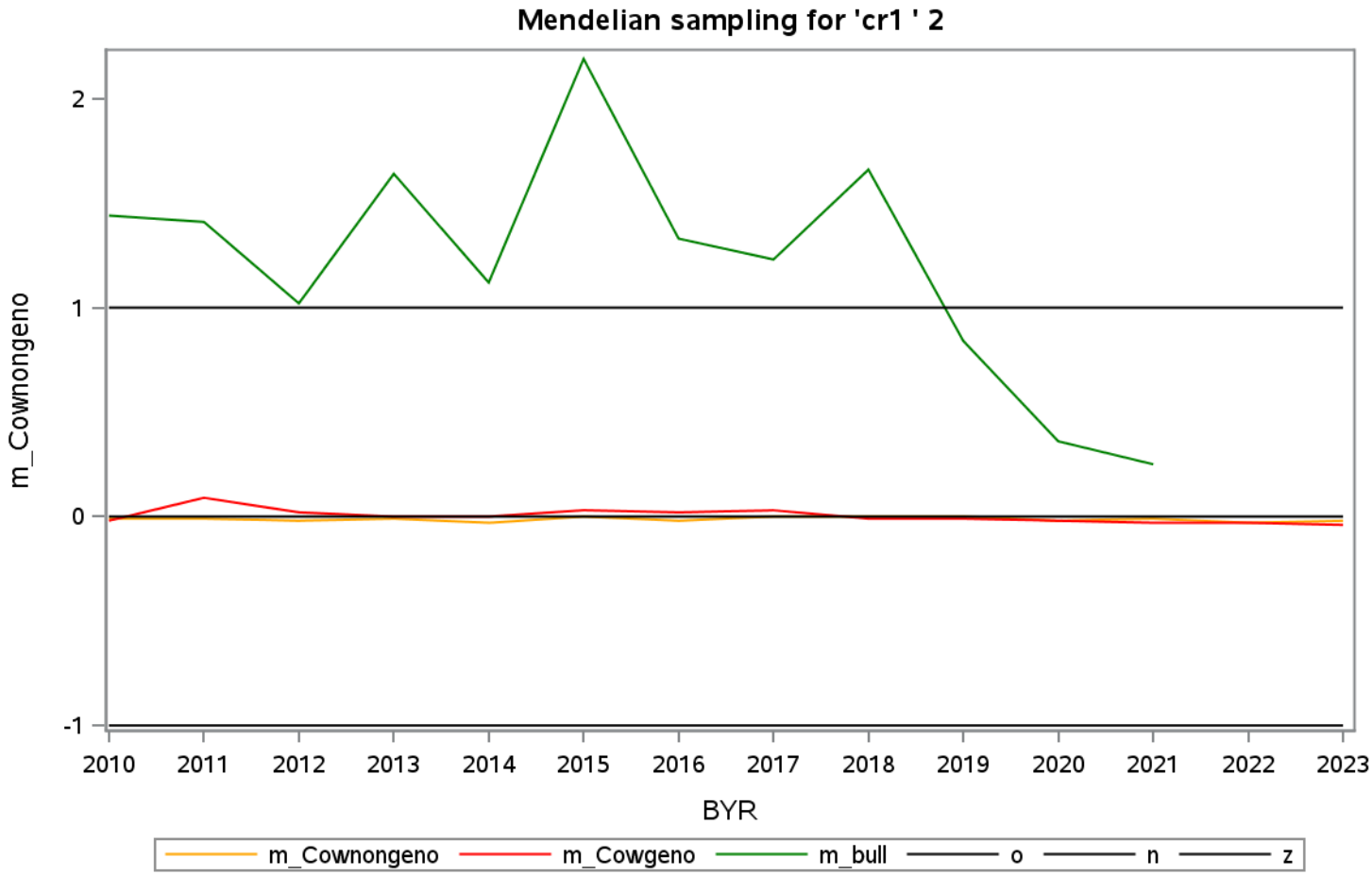
Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	0.01	-2.55	-1.94	190762	1155	720
2	2011	0.04	-1.88	-1.06	190687	2525	1186
3	2012	0.04	-0.90	-0.65	187914	4071	1566
4	2013	0.08	-0.07	0.37	180568	6994	1660
5	2014	0.07	0.24	-0.29	179312	7701	1837
6	2015	0.11	0.45	0.48	167249	10117	1820
7	2016	0.12	0.12	0.02	159783	16861	2148
8	2017	0.18	0.40	-0.01	134471	24932	2285
9	2018	0.18	0.71	0.42	117544	34013	2181
10	2019	0.14	1.15	0.41	108692	39121	2330
11	2020	0.10	1.56	0.67	104404	45550	2170
12	2021	0.07	1.42	0.98	89802	38704	1647
13	2022	0.01	1.21	0.67	50529	38286	1672
14	2023	-0.04	0.89	0.77	79	40006	1855
15	2024	.	0.53	0.06	.	9691	631



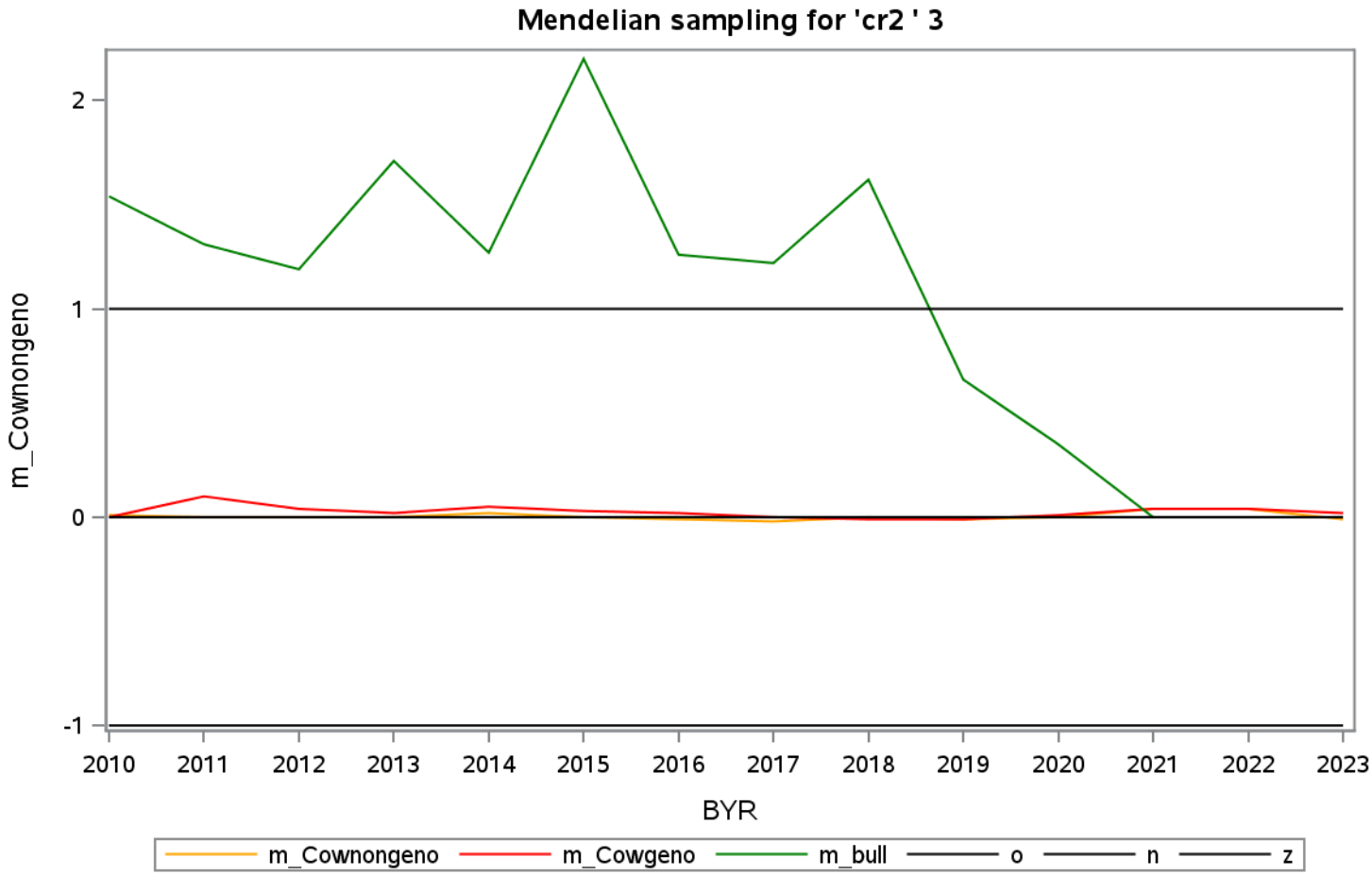
Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	-0.04	-0.07	0.78	191490	1121	177
2	2011	-0.02	0.03	0.99	191310	2453	193
3	2012	0.00	0.02	0.42	188466	3904	217
4	2013	-0.02	-0.01	1.25	180976	6595	170
5	2014	-0.02	0.00	0.51	179690	7217	130
6	2015	-0.02	0.00	1.74	167519	9214	100
7	2016	0.01	0.04	0.97	159985	14948	98
8	2017	-0.02	0.00	0.79	134616	21444	139
9	2018	0.01	0.01	1.42	117677	29078	123
10	2019	-0.01	-0.02	1.09	108799	32774	79
11	2020	0.00	0.00	0.53	104542	37902	48
12	2021	0.03	0.02	0.08	90434	35313	6
13	2022	0.02	0.03	.	58899	29466	.
14	2023	0.00	0.01	.	2062	1166	.



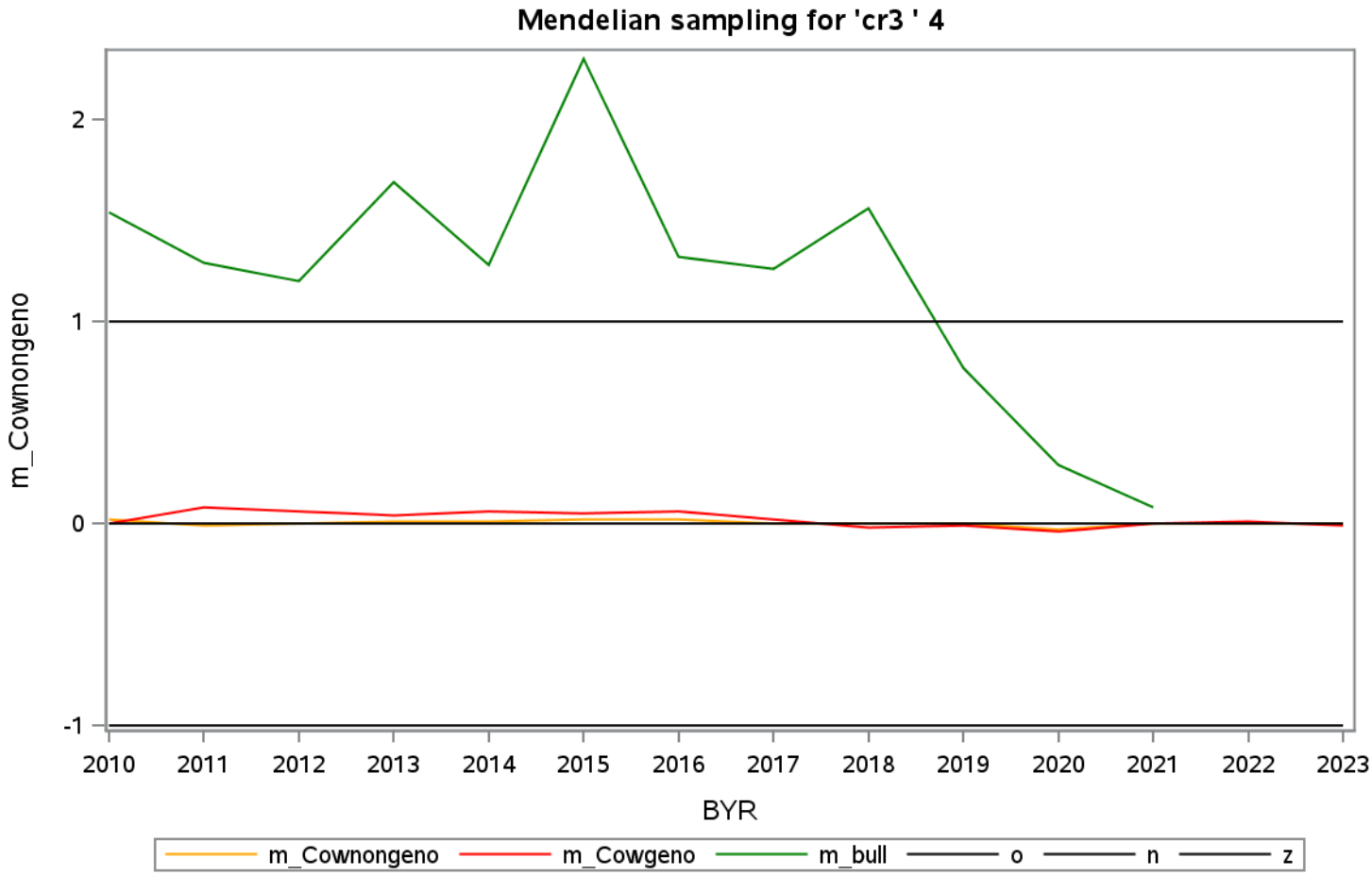
Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	-0.01	-0.02	1.44	191490	1121	177
2	2011	-0.01	0.09	1.41	191310	2453	193
3	2012	-0.02	0.02	1.02	188466	3904	217
4	2013	-0.01	0.00	1.64	180976	6595	170
5	2014	-0.03	0.00	1.12	179690	7217	130
6	2015	0.00	0.03	2.19	167519	9214	100
7	2016	-0.02	0.02	1.33	159985	14948	98
8	2017	0.00	0.03	1.23	134616	21444	139
9	2018	0.00	-0.01	1.66	117677	29078	123
10	2019	0.00	-0.01	0.84	108799	32774	79
11	2020	-0.02	-0.02	0.36	104542	37902	48
12	2021	-0.01	-0.03	0.25	90434	35313	6
13	2022	-0.03	-0.03	.	58899	29466	.
14	2023	-0.02	-0.04	.	2062	1166	.



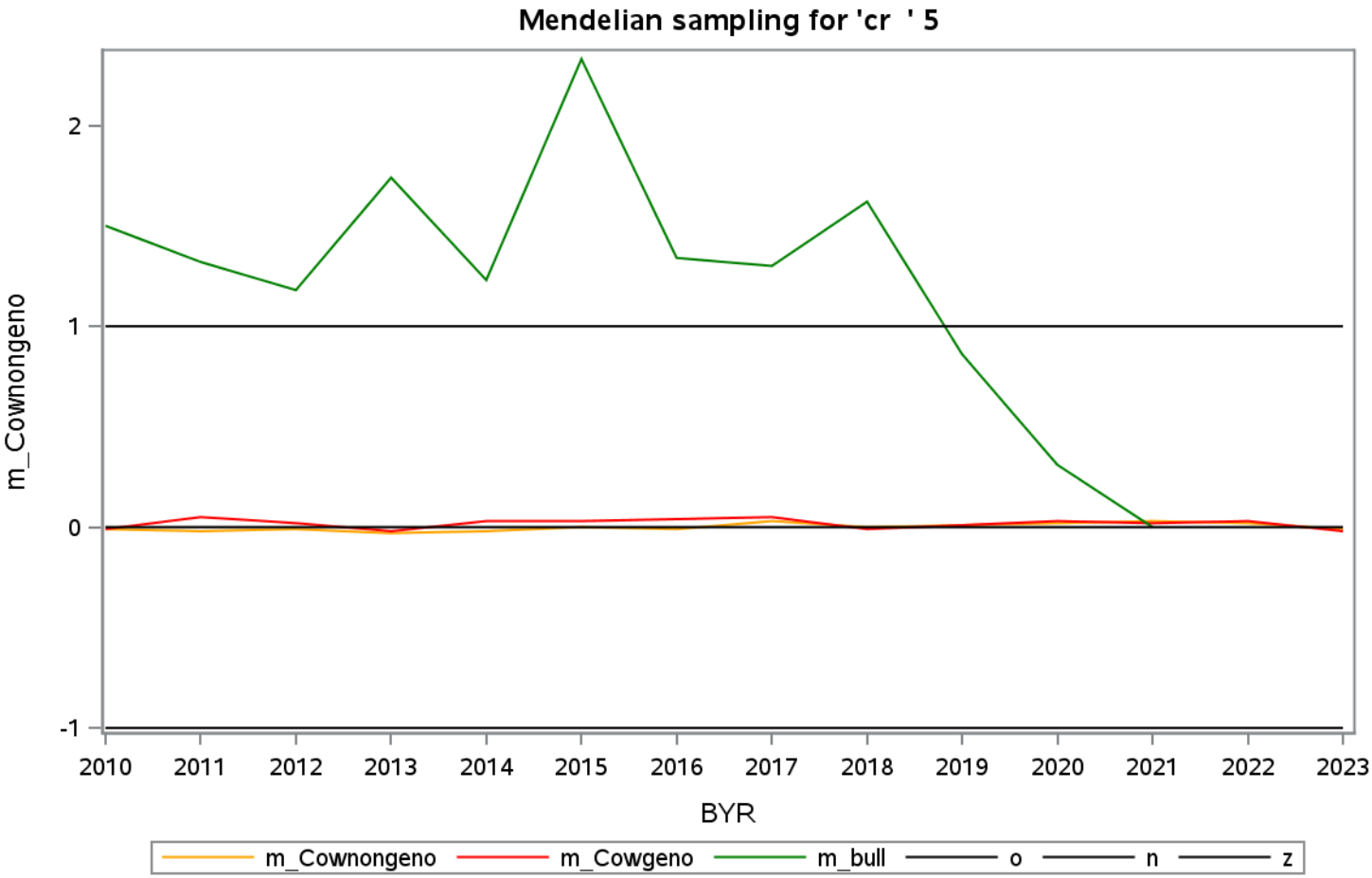
Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	0.01	0.00	1.54	191490	1121	177
2	2011	0.00	0.10	1.31	191310	2453	193
3	2012	0.00	0.04	1.19	188466	3904	217
4	2013	0.00	0.02	1.71	180976	6595	170
5	2014	0.02	0.05	1.27	179690	7217	130
6	2015	0.00	0.03	2.20	167519	9214	100
7	2016	-0.01	0.02	1.26	159985	14948	98
8	2017	-0.02	0.00	1.22	134616	21444	139
9	2018	0.00	-0.01	1.62	117677	29078	123
10	2019	-0.01	-0.01	0.66	108799	32774	79
11	2020	0.00	0.01	0.35	104542	37902	48
12	2021	0.04	0.04	0.00	90434	35313	6
13	2022	0.04	0.04	.	58899	29466	.
14	2023	-0.01	0.02	.	2062	1166	.



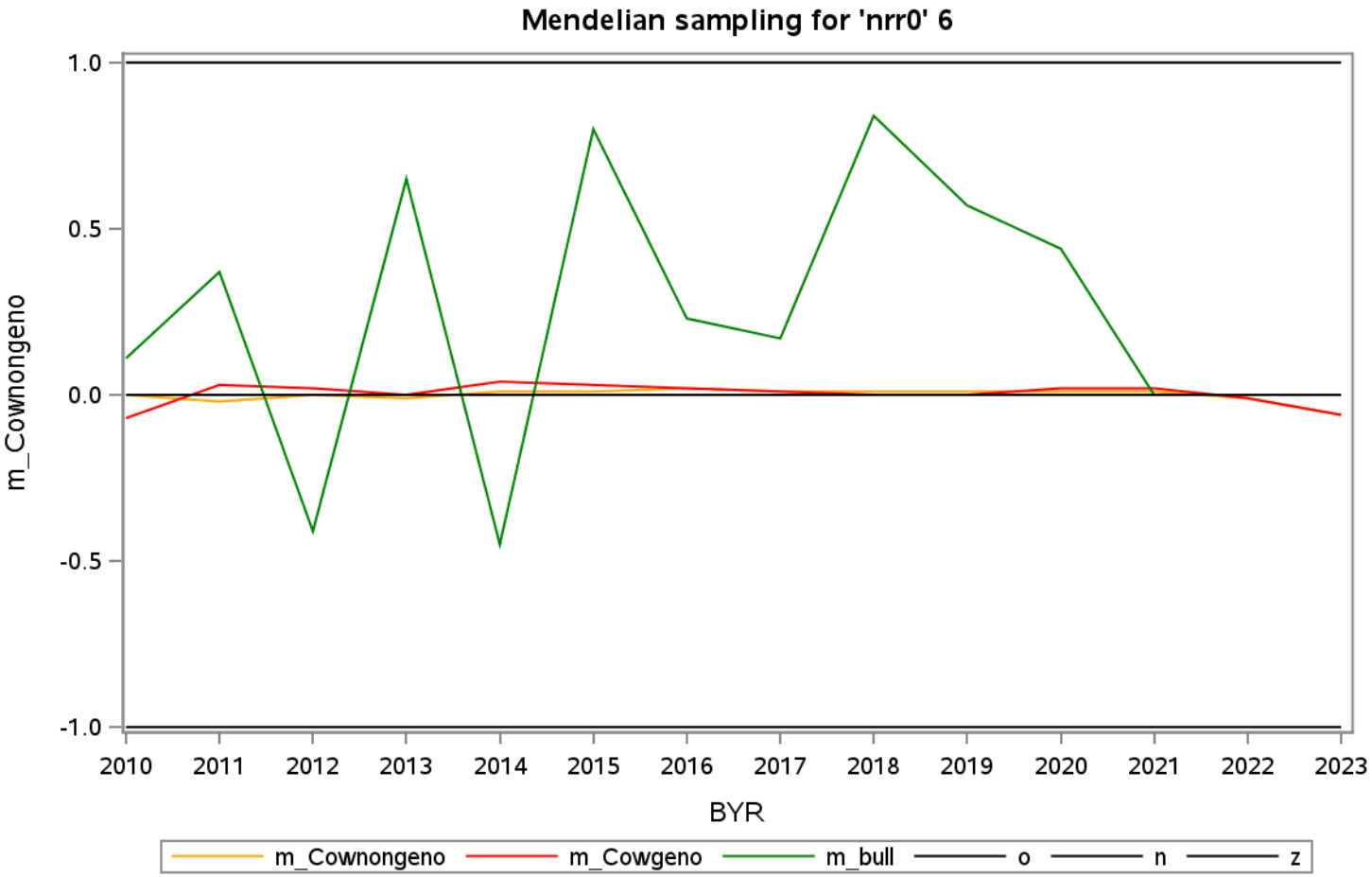
Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	0.02	0.00	1.54	191490	1121	177
2	2011	-0.01	0.08	1.29	191310	2453	193
3	2012	0.00	0.06	1.20	188466	3904	217
4	2013	0.01	0.04	1.69	180976	6595	170
5	2014	0.01	0.06	1.28	179690	7217	130
6	2015	0.02	0.05	2.30	167519	9214	100
7	2016	0.02	0.06	1.32	159985	14948	98
8	2017	0.00	0.02	1.26	134616	21444	139
9	2018	0.00	-0.02	1.56	117677	29078	123
10	2019	0.00	-0.01	0.77	108799	32774	79
11	2020	-0.03	-0.04	0.29	104542	37902	48
12	2021	0.00	0.00	0.08	90434	35313	6
13	2022	0.00	0.01	.	58899	29466	.
14	2023	0.00	-0.01	.	2062	1166	.



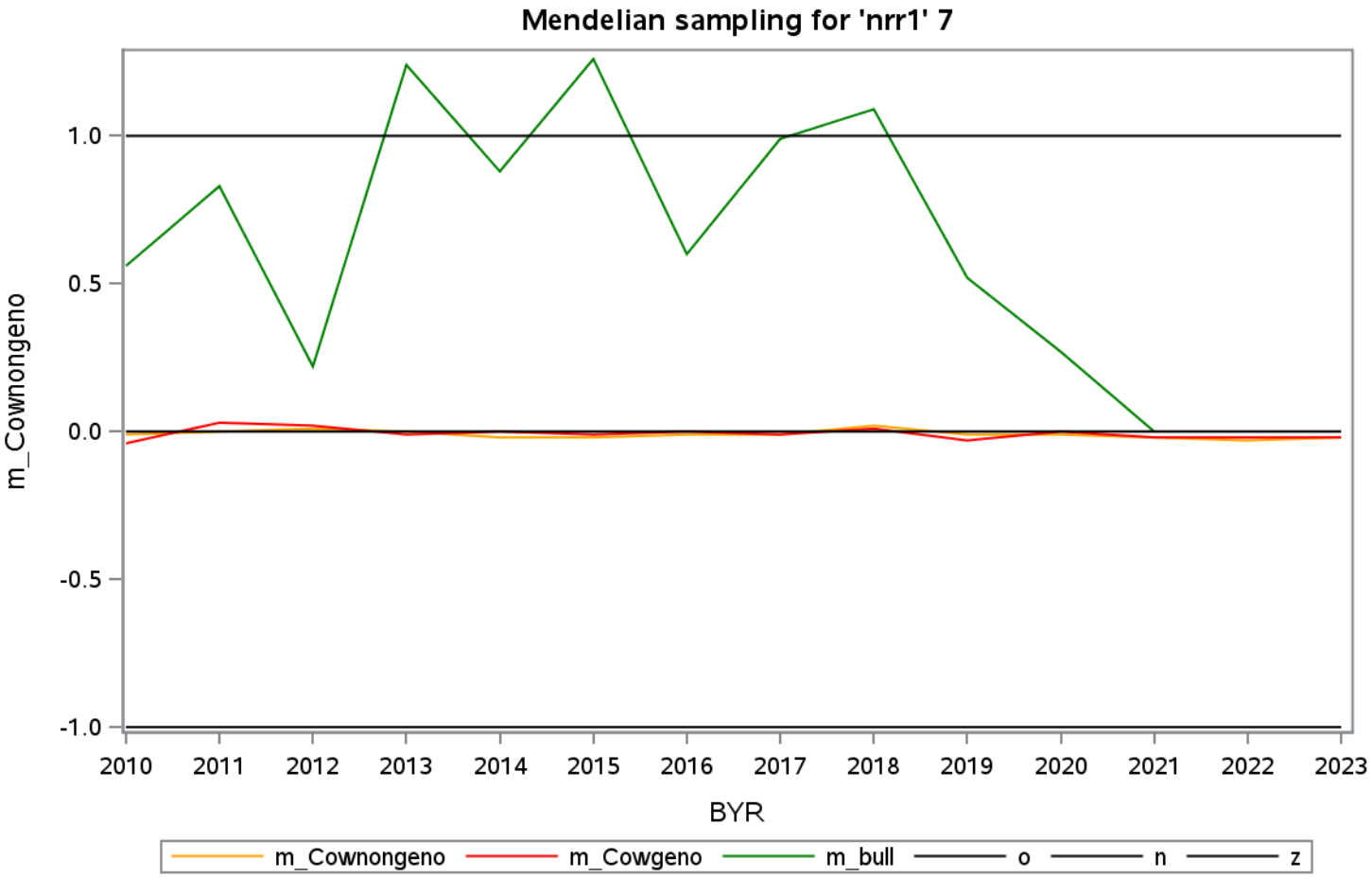
Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	-0.01	-0.01	1.50	191490	1121	177
2	2011	-0.02	0.05	1.32	191310	2453	193
3	2012	-0.01	0.02	1.18	188466	3904	217
4	2013	-0.03	-0.02	1.74	180976	6595	170
5	2014	-0.02	0.03	1.23	179690	7217	130
6	2015	0.00	0.03	2.33	167519	9214	100
7	2016	-0.01	0.04	1.34	159985	14948	98
8	2017	0.03	0.05	1.30	134616	21444	139
9	2018	0.00	-0.01	1.62	117677	29078	123
10	2019	0.01	0.01	0.86	108799	32774	79
11	2020	0.02	0.03	0.31	104542	37902	48
12	2021	0.03	0.02	0.00	90434	35313	6
13	2022	0.02	0.03	.	58899	29466	.
14	2023	-0.01	-0.02	.	2062	1166	.



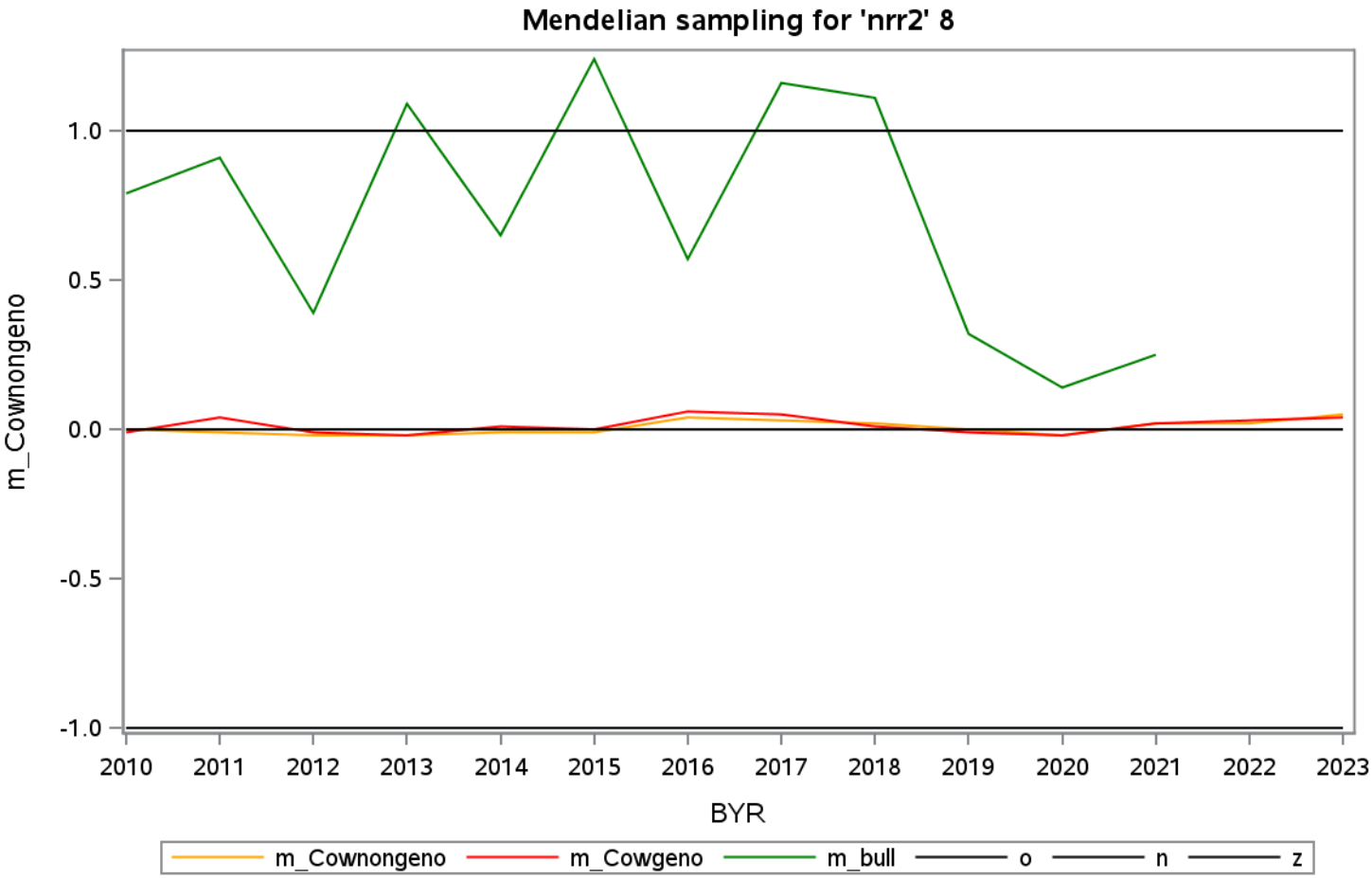
Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	0.00	-0.07	0.11	191490	1121	177
2	2011	-0.02	0.03	0.37	191310	2453	193
3	2012	0.00	0.02	-0.41	188466	3904	217
4	2013	-0.01	0.00	0.65	180976	6595	170
5	2014	0.01	0.04	-0.45	179690	7217	130
6	2015	0.01	0.03	0.80	167519	9214	100
7	2016	0.02	0.02	0.23	159985	14948	98
8	2017	0.01	0.01	0.17	134616	21444	139
9	2018	0.01	0.00	0.84	117677	29078	123
10	2019	0.01	0.00	0.57	108799	32774	79
11	2020	0.01	0.02	0.44	104542	37902	48
12	2021	0.01	0.02	0.00	90434	35313	6
13	2022	-0.01	-0.01	.	58899	29466	.
14	2023	-0.06	-0.06	.	2062	1166	.



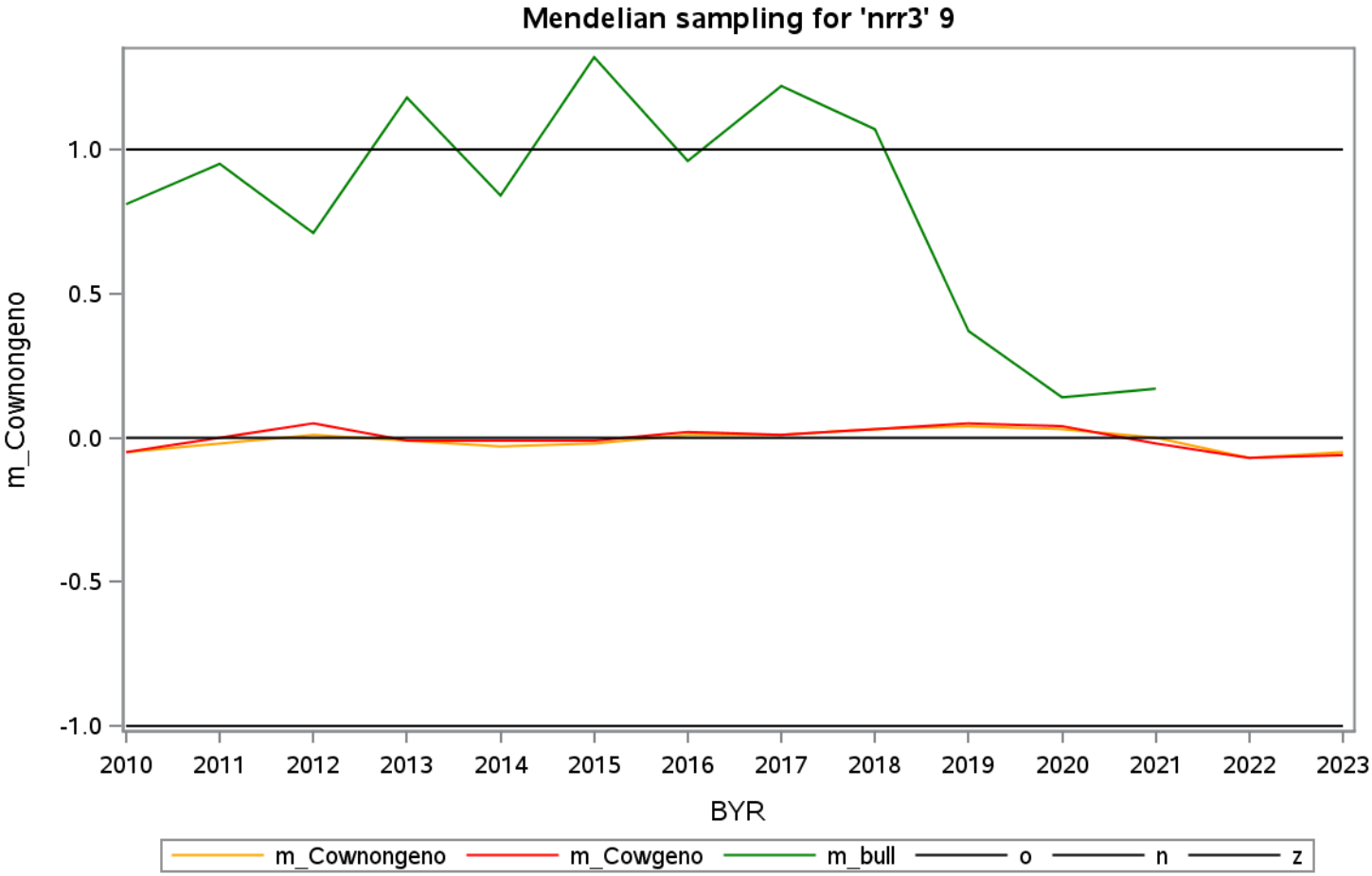
Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	-0.01	-0.04	0.56	191490	1121	177
2	2011	0.00	0.03	0.83	191310	2453	193
3	2012	0.01	0.02	0.22	188466	3904	217
4	2013	0.00	-0.01	1.24	180976	6595	170
5	2014	-0.02	0.00	0.88	179690	7217	130
6	2015	-0.02	-0.01	1.26	167519	9214	100
7	2016	-0.01	0.00	0.60	159985	14948	98
8	2017	-0.01	-0.01	0.99	134616	21444	139
9	2018	0.02	0.01	1.09	117677	29078	123
10	2019	-0.01	-0.03	0.52	108799	32774	79
11	2020	-0.01	0.00	0.27	104542	37902	48
12	2021	-0.02	-0.02	0.00	90434	35313	6
13	2022	-0.03	-0.02	.	58899	29466	.
14	2023	-0.02	-0.02	.	2062	1166	.



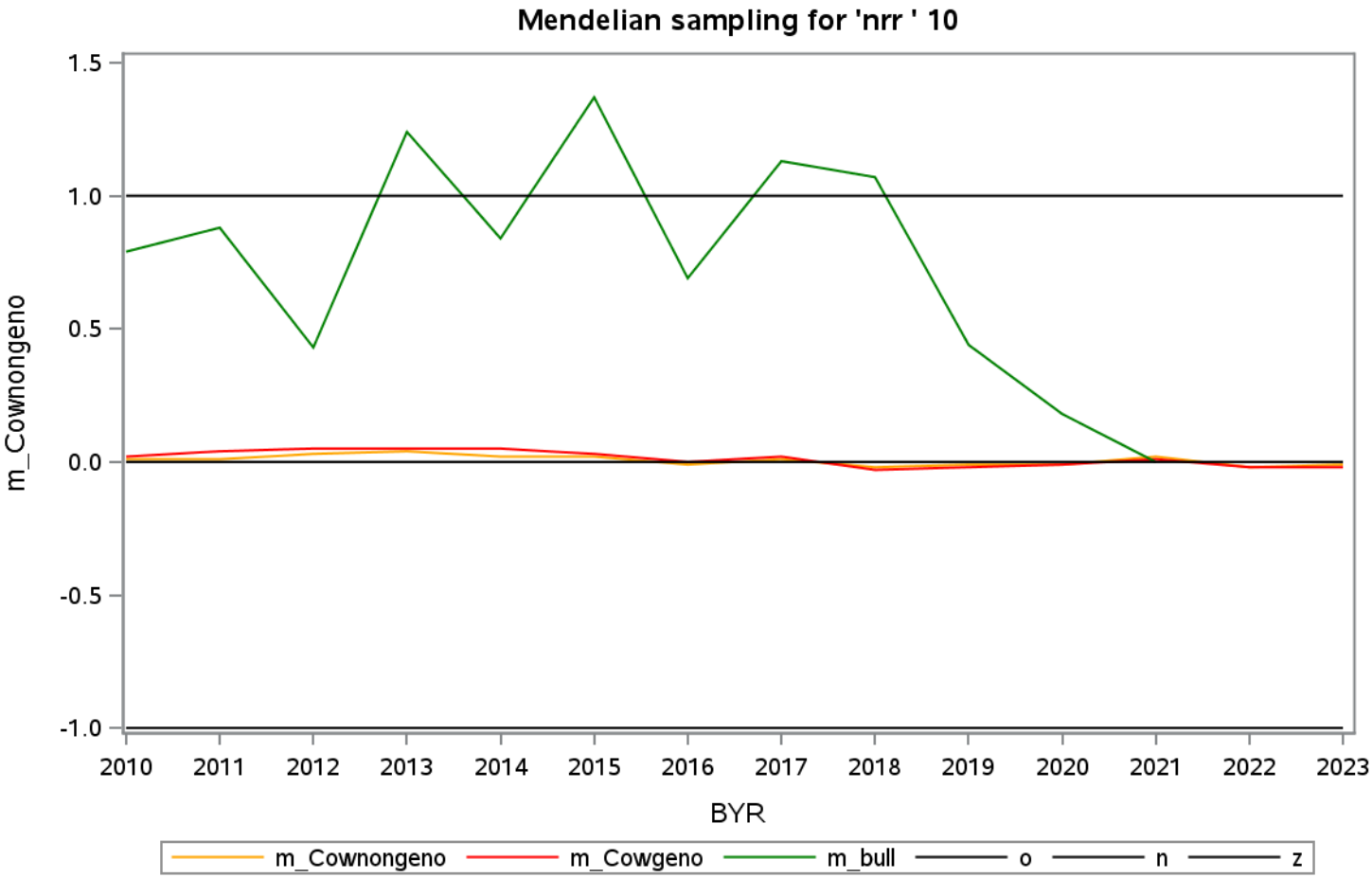
Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	0.00	-0.01	0.79	191490	1121	177
2	2011	-0.01	0.04	0.91	191310	2453	193
3	2012	-0.02	-0.01	0.39	188466	3904	217
4	2013	-0.02	-0.02	1.09	180976	6595	170
5	2014	-0.01	0.01	0.65	179690	7217	130
6	2015	-0.01	0.00	1.24	167519	9214	100
7	2016	0.04	0.06	0.57	159985	14948	98
8	2017	0.03	0.05	1.16	134616	21444	139
9	2018	0.02	0.01	1.11	117677	29078	123
10	2019	0.00	-0.01	0.32	108799	32774	79
11	2020	-0.02	-0.02	0.14	104542	37902	48
12	2021	0.02	0.02	0.25	90434	35313	6
13	2022	0.02	0.03	.	58899	29466	.
14	2023	0.05	0.04	.	2062	1166	.



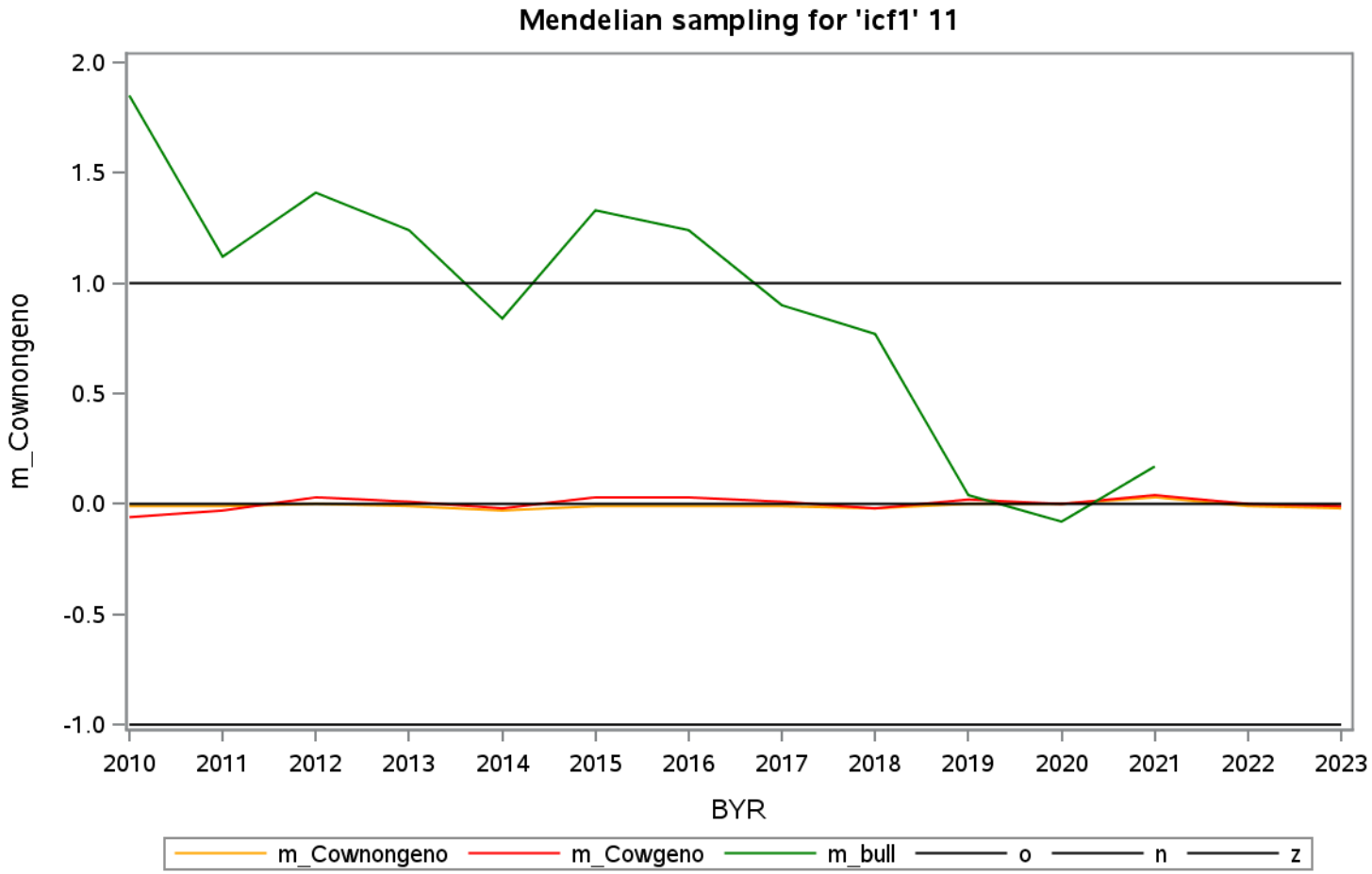
Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	-0.05	-0.05	0.81	191490	1121	177
2	2011	-0.02	0.00	0.95	191310	2453	193
3	2012	0.01	0.05	0.71	188466	3904	217
4	2013	-0.01	-0.01	1.18	180976	6595	170
5	2014	-0.03	-0.01	0.84	179690	7217	130
6	2015	-0.02	-0.01	1.32	167519	9214	100
7	2016	0.01	0.02	0.96	159985	14948	98
8	2017	0.01	0.01	1.22	134616	21444	139
9	2018	0.03	0.03	1.07	117677	29078	123
10	2019	0.04	0.05	0.37	108799	32774	79
11	2020	0.03	0.04	0.14	104542	37902	48
12	2021	0.00	-0.02	0.17	90434	35313	6
13	2022	-0.07	-0.07	.	58899	29466	.
14	2023	-0.05	-0.06	.	2062	1166	.



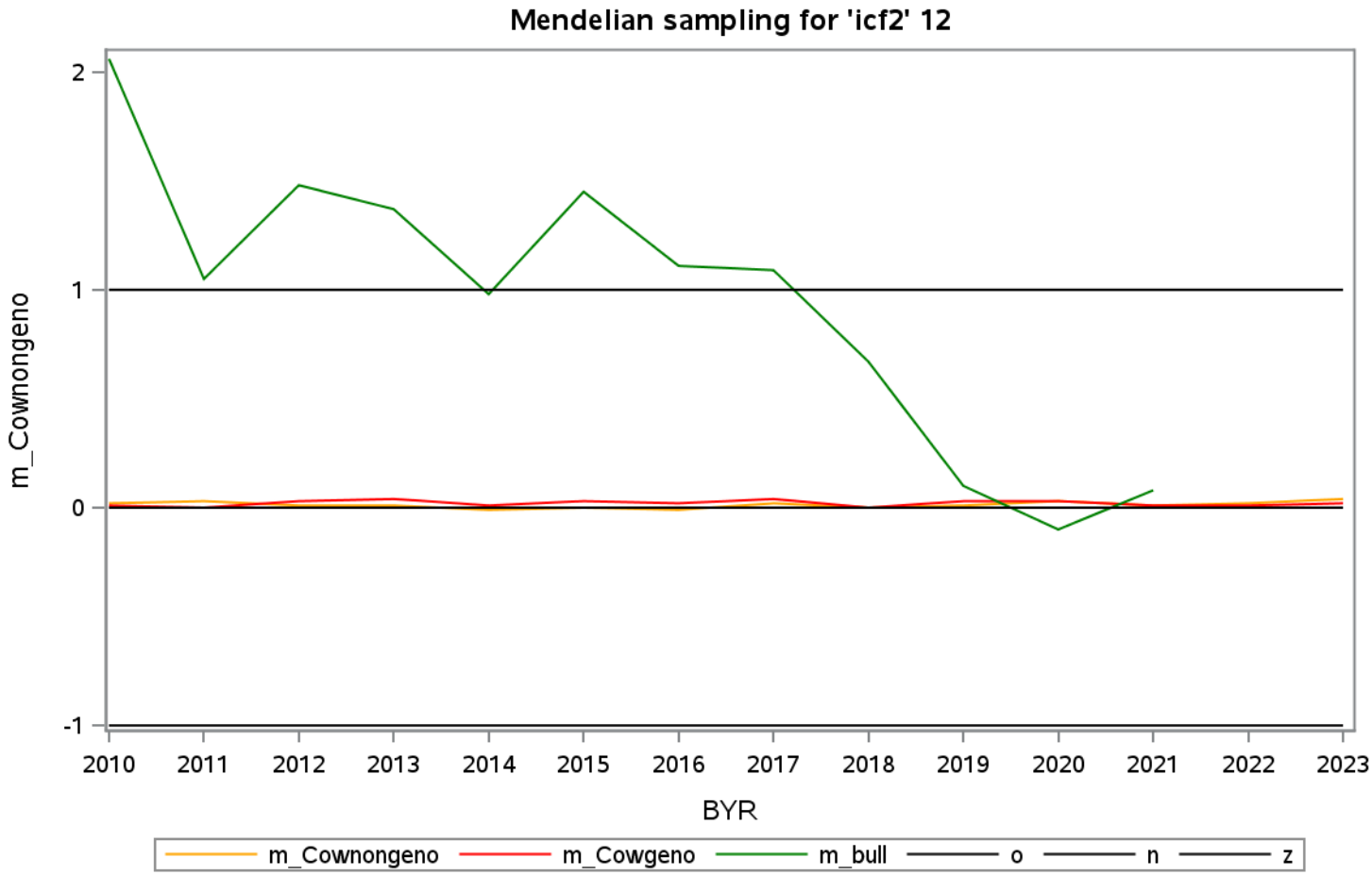
Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	0.01	0.02	0.79	191490	1121	177
2	2011	0.01	0.04	0.88	191310	2453	193
3	2012	0.03	0.05	0.43	188466	3904	217
4	2013	0.04	0.05	1.24	180976	6595	170
5	2014	0.02	0.05	0.84	179690	7217	130
6	2015	0.02	0.03	1.37	167519	9214	100
7	2016	-0.01	0.00	0.69	159985	14948	98
8	2017	0.01	0.02	1.13	134616	21444	139
9	2018	-0.02	-0.03	1.07	117677	29078	123
10	2019	-0.01	-0.02	0.44	108799	32774	79
11	2020	-0.01	-0.01	0.18	104542	37902	48
12	2021	0.02	0.01	0.00	90434	35313	6
13	2022	-0.02	-0.02	.	58899	29466	.
14	2023	-0.01	-0.02	.	2062	1166	.



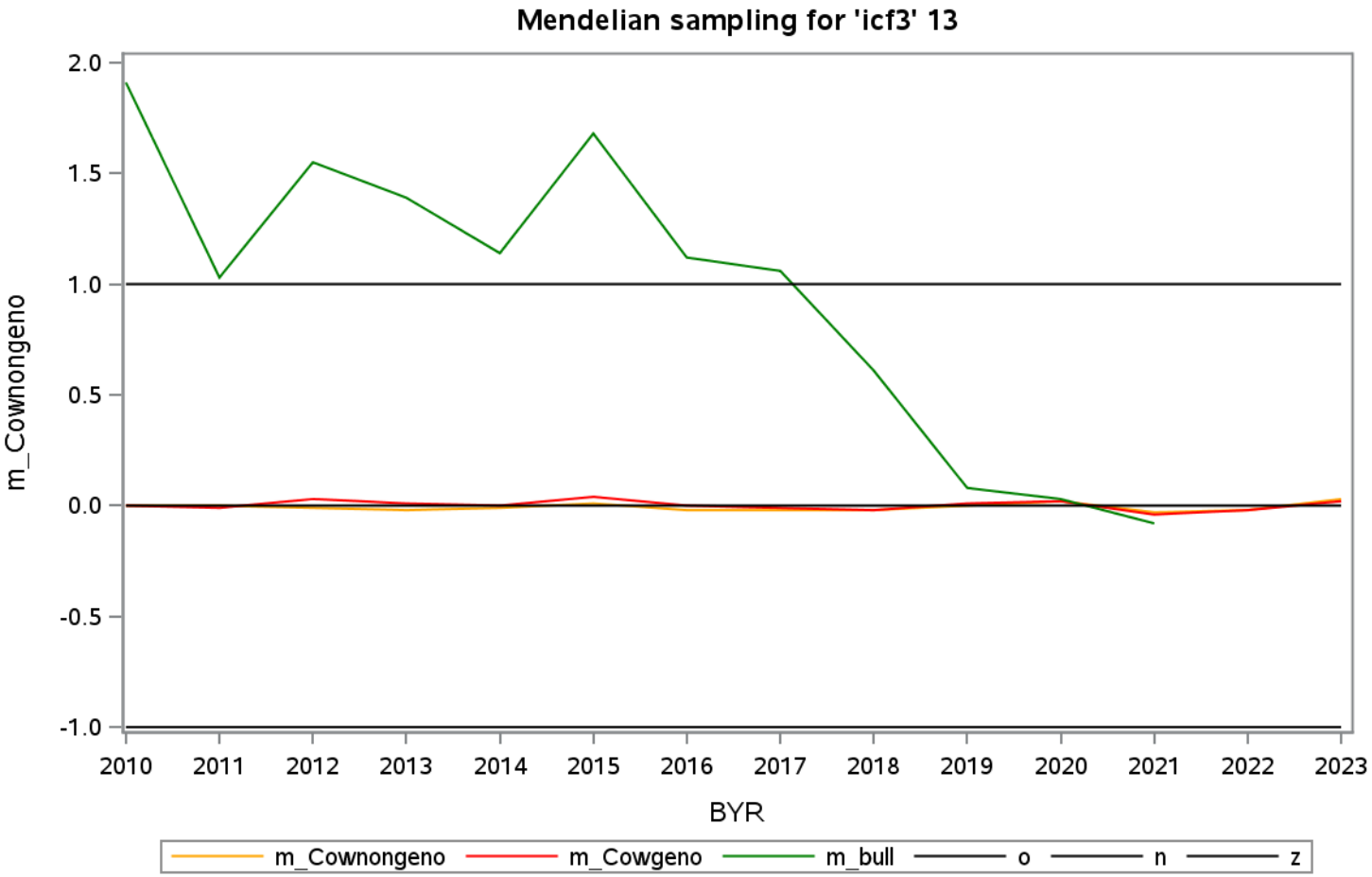
Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	-0.01	-0.06	1.85	191490	1121	177
2	2011	-0.01	-0.03	1.12	191310	2453	193
3	2012	0.00	0.03	1.41	188466	3904	217
4	2013	-0.01	0.01	1.24	180976	6595	170
5	2014	-0.03	-0.02	0.84	179690	7217	130
6	2015	-0.01	0.03	1.33	167519	9214	100
7	2016	-0.01	0.03	1.24	159985	14948	98
8	2017	-0.01	0.01	0.90	134616	21444	139
9	2018	-0.02	-0.02	0.77	117677	29078	123
10	2019	0.00	0.02	0.04	108799	32774	79
11	2020	0.00	0.00	-0.08	104542	37902	48
12	2021	0.03	0.04	0.17	90434	35313	6
13	2022	-0.01	0.00	.	58899	29466	.
14	2023	-0.02	-0.01	.	2062	1166	.



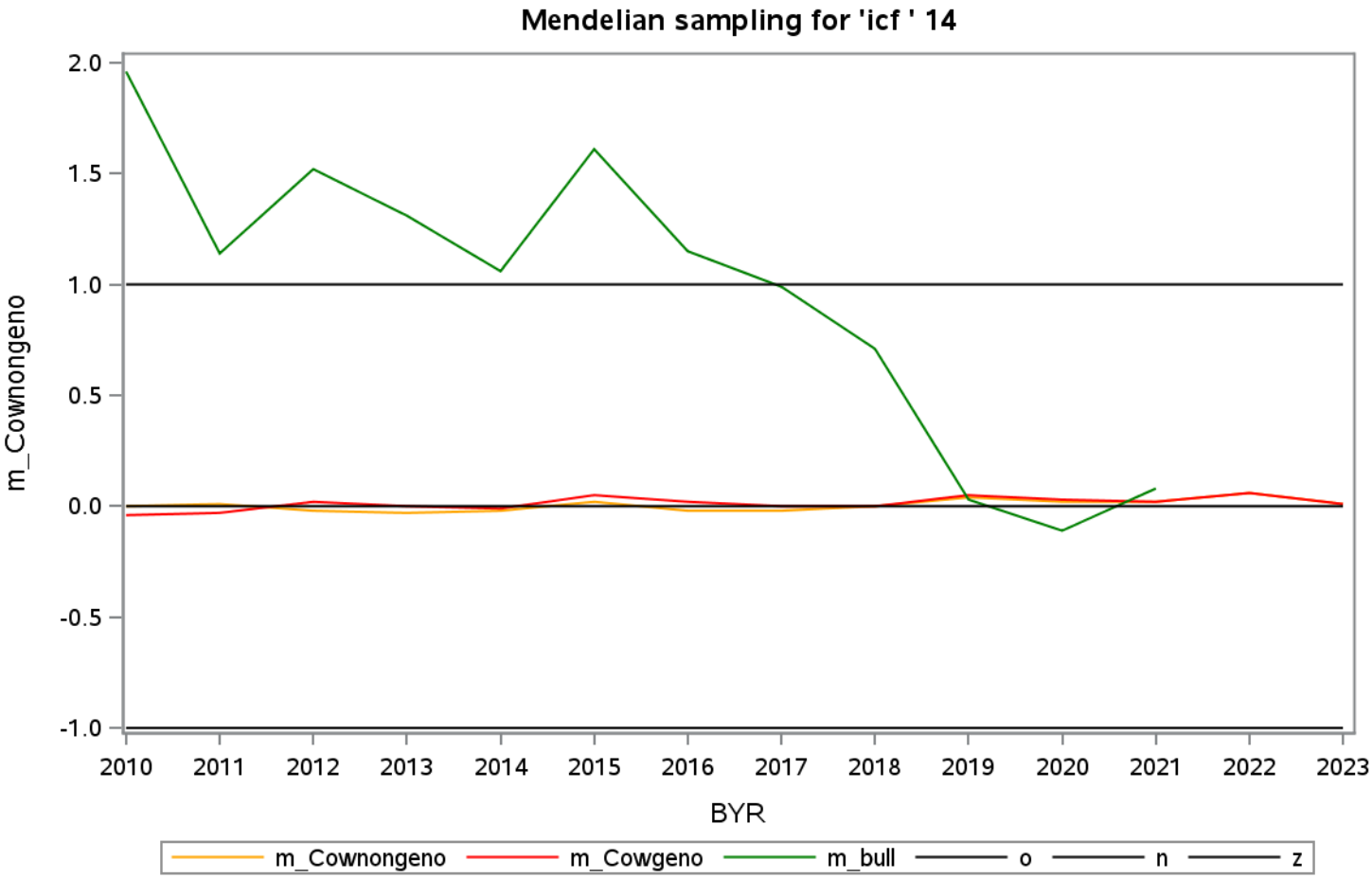
Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	0.02	0.01	2.06	191490	1121	177
2	2011	0.03	0.00	1.05	191310	2453	193
3	2012	0.01	0.03	1.48	188466	3904	217
4	2013	0.01	0.04	1.37	180976	6595	170
5	2014	-0.01	0.01	0.98	179690	7217	130
6	2015	0.00	0.03	1.45	167519	9214	100
7	2016	-0.01	0.02	1.11	159985	14948	98
8	2017	0.02	0.04	1.09	134616	21444	139
9	2018	0.00	0.00	0.67	117677	29078	123
10	2019	0.01	0.03	0.10	108799	32774	79
11	2020	0.03	0.03	-0.10	104542	37902	48
12	2021	0.01	0.01	0.08	90434	35313	6
13	2022	0.02	0.01	.	58899	29466	.
14	2023	0.04	0.02	.	2062	1166	.



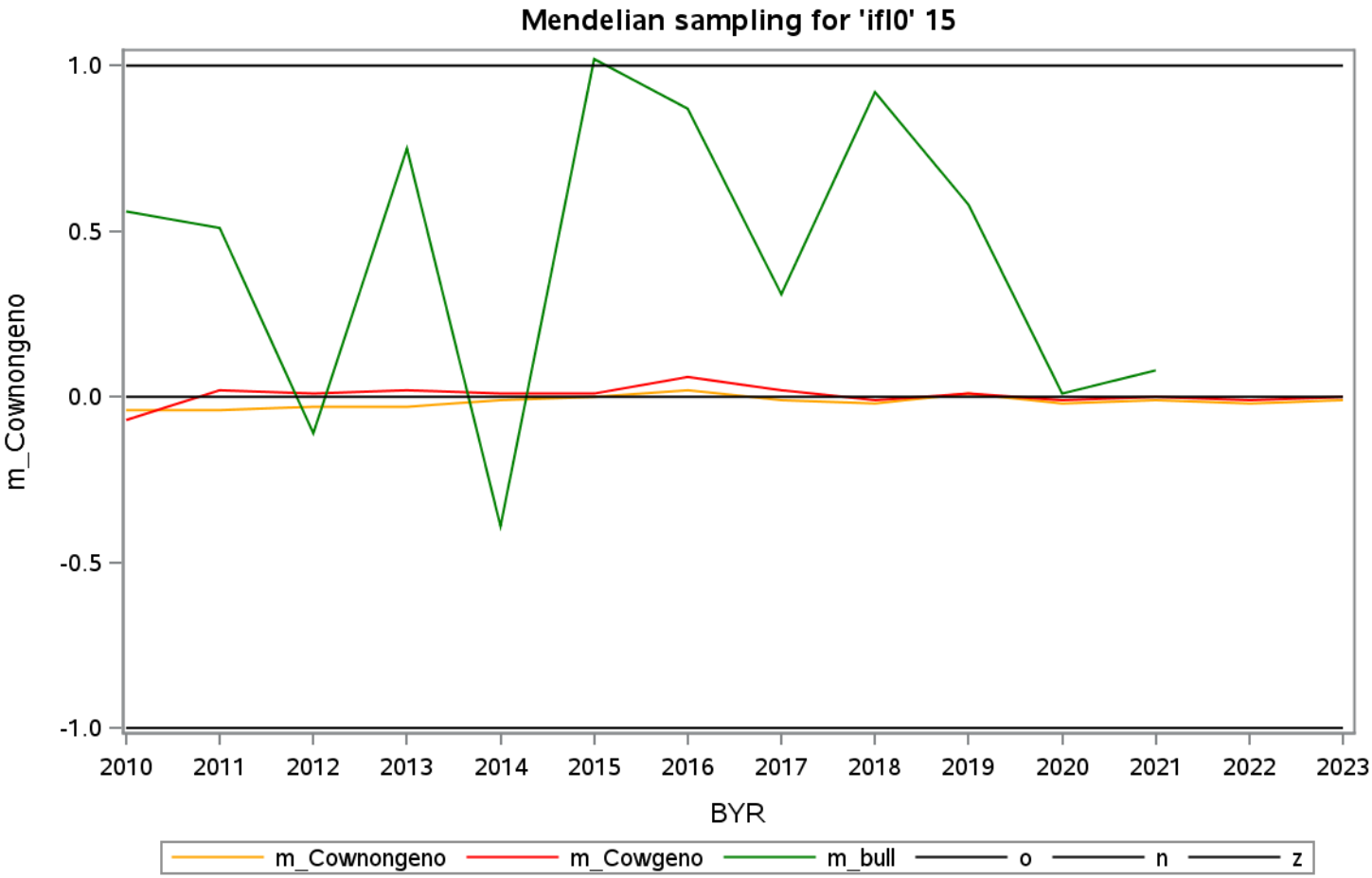
Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	0.00	0.00	1.91	191490	1121	177
2	2011	0.00	-0.01	1.03	191310	2453	193
3	2012	-0.01	0.03	1.55	188466	3904	217
4	2013	-0.02	0.01	1.39	180976	6595	170
5	2014	-0.01	0.00	1.14	179690	7217	130
6	2015	0.01	0.04	1.68	167519	9214	100
7	2016	-0.02	0.00	1.12	159985	14948	98
8	2017	-0.02	-0.01	1.06	134616	21444	139
9	2018	-0.02	-0.02	0.61	117677	29078	123
10	2019	0.00	0.01	0.08	108799	32774	79
11	2020	0.02	0.02	0.03	104542	37902	48
12	2021	-0.03	-0.04	-0.08	90434	35313	6
13	2022	-0.02	-0.02	.	58899	29466	.
14	2023	0.03	0.02	.	2062	1166	.



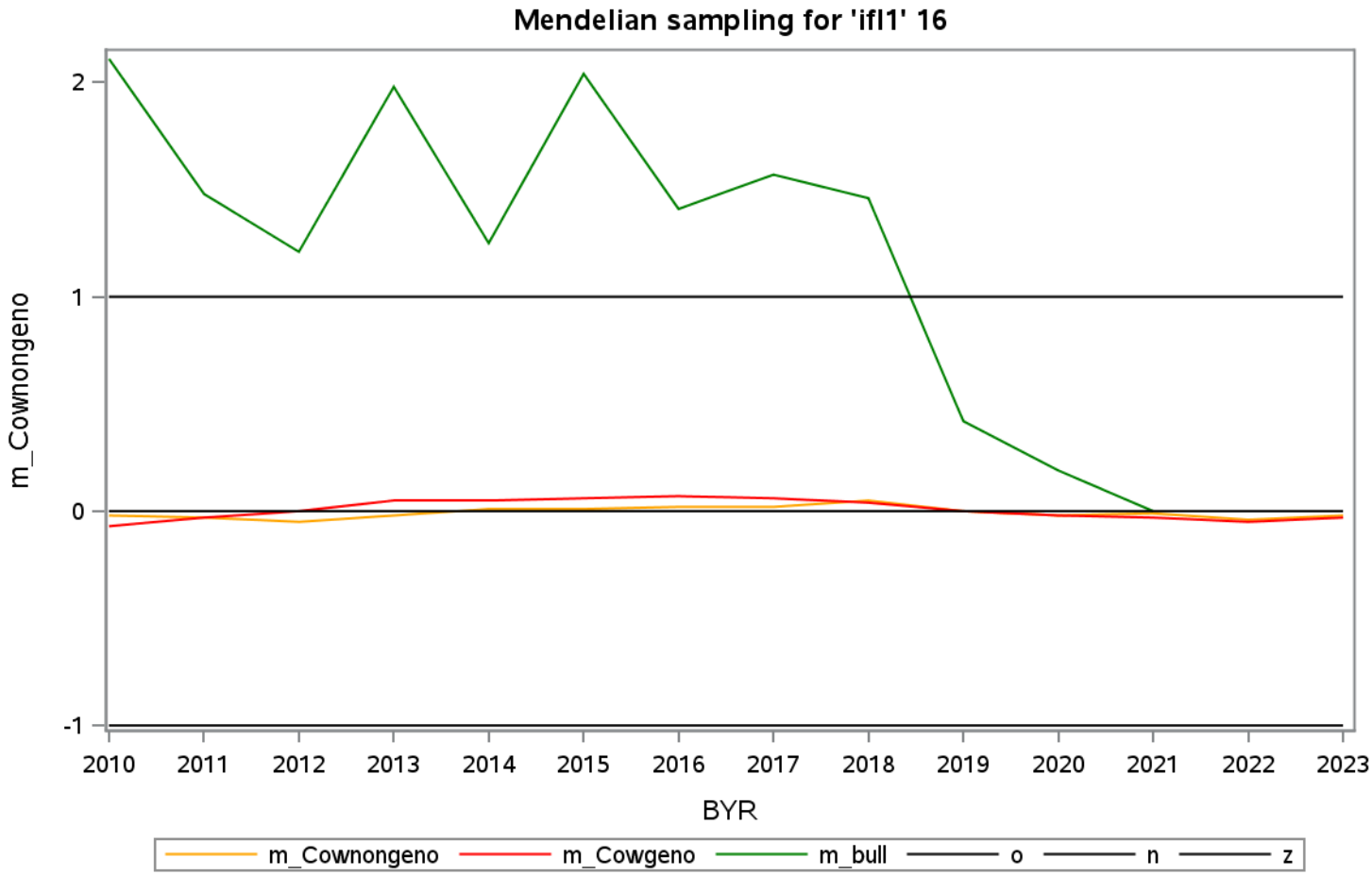
Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	0.00	-0.04	1.96	191490	1121	177
2	2011	0.01	-0.03	1.14	191310	2453	193
3	2012	-0.02	0.02	1.52	188466	3904	217
4	2013	-0.03	0.00	1.31	180976	6595	170
5	2014	-0.02	-0.01	1.06	179690	7217	130
6	2015	0.02	0.05	1.61	167519	9214	100
7	2016	-0.02	0.02	1.15	159985	14948	98
8	2017	-0.02	0.00	0.99	134616	21444	139
9	2018	0.00	0.00	0.71	117677	29078	123
10	2019	0.04	0.05	0.03	108799	32774	79
11	2020	0.02	0.03	-0.11	104542	37902	48
12	2021	0.02	0.02	0.08	90434	35313	6
13	2022	0.06	0.06	.	58899	29466	.
14	2023	0.01	0.01	.	2062	1166	.



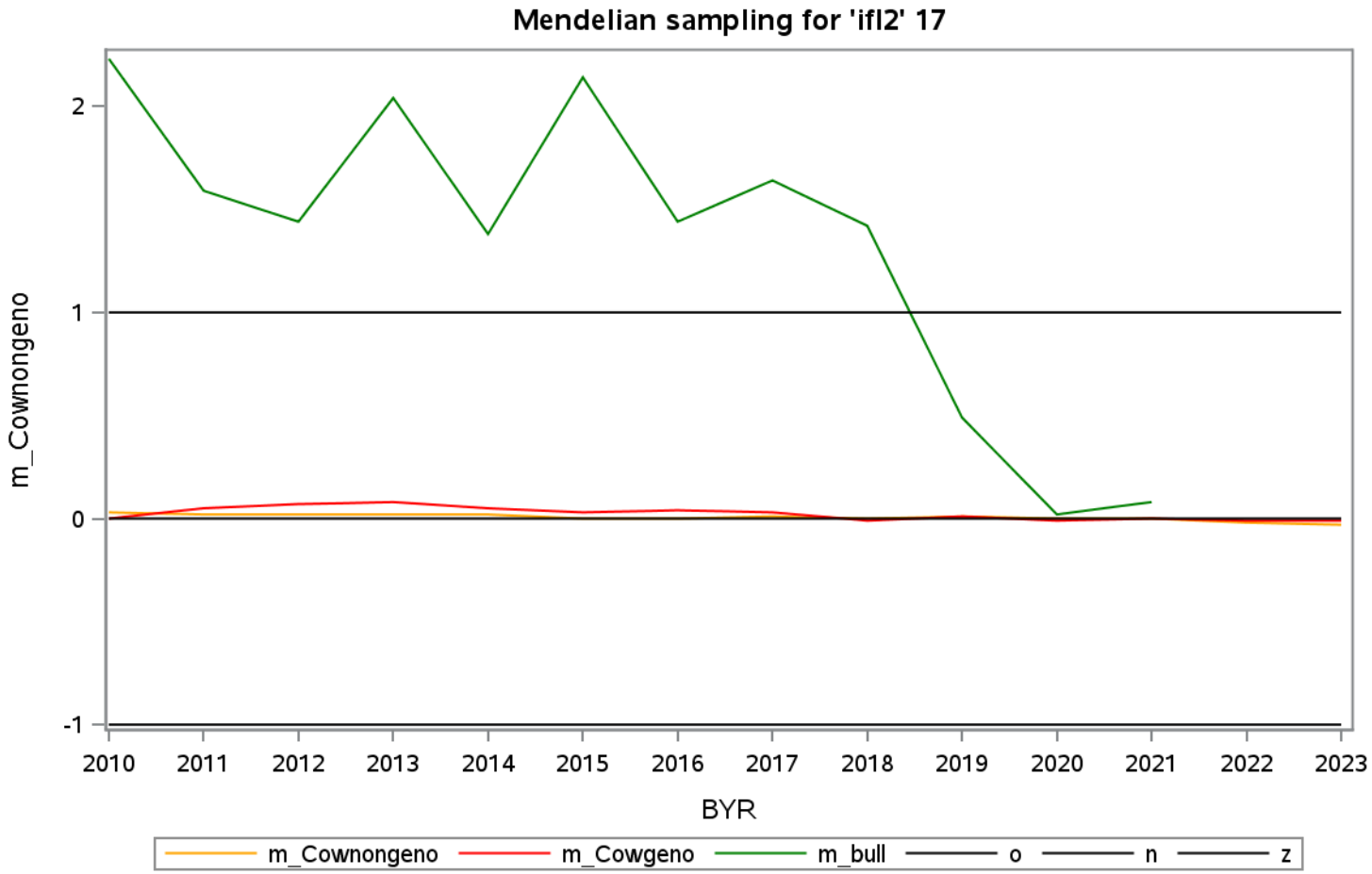
Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	-0.04	-0.07	0.56	191490	1121	177
2	2011	-0.04	0.02	0.51	191310	2453	193
3	2012	-0.03	0.01	-0.11	188466	3904	217
4	2013	-0.03	0.02	0.75	180976	6595	170
5	2014	-0.01	0.01	-0.39	179690	7217	130
6	2015	0.00	0.01	1.02	167519	9214	100
7	2016	0.02	0.06	0.87	159985	14948	98
8	2017	-0.01	0.02	0.31	134616	21444	139
9	2018	-0.02	-0.01	0.92	117677	29078	123
10	2019	0.01	0.01	0.58	108799	32774	79
11	2020	-0.02	-0.01	0.01	104542	37902	48
12	2021	-0.01	0.00	0.08	90434	35313	6
13	2022	-0.02	-0.01	.	58899	29466	.
14	2023	-0.01	0.00	.	2062	1166	.



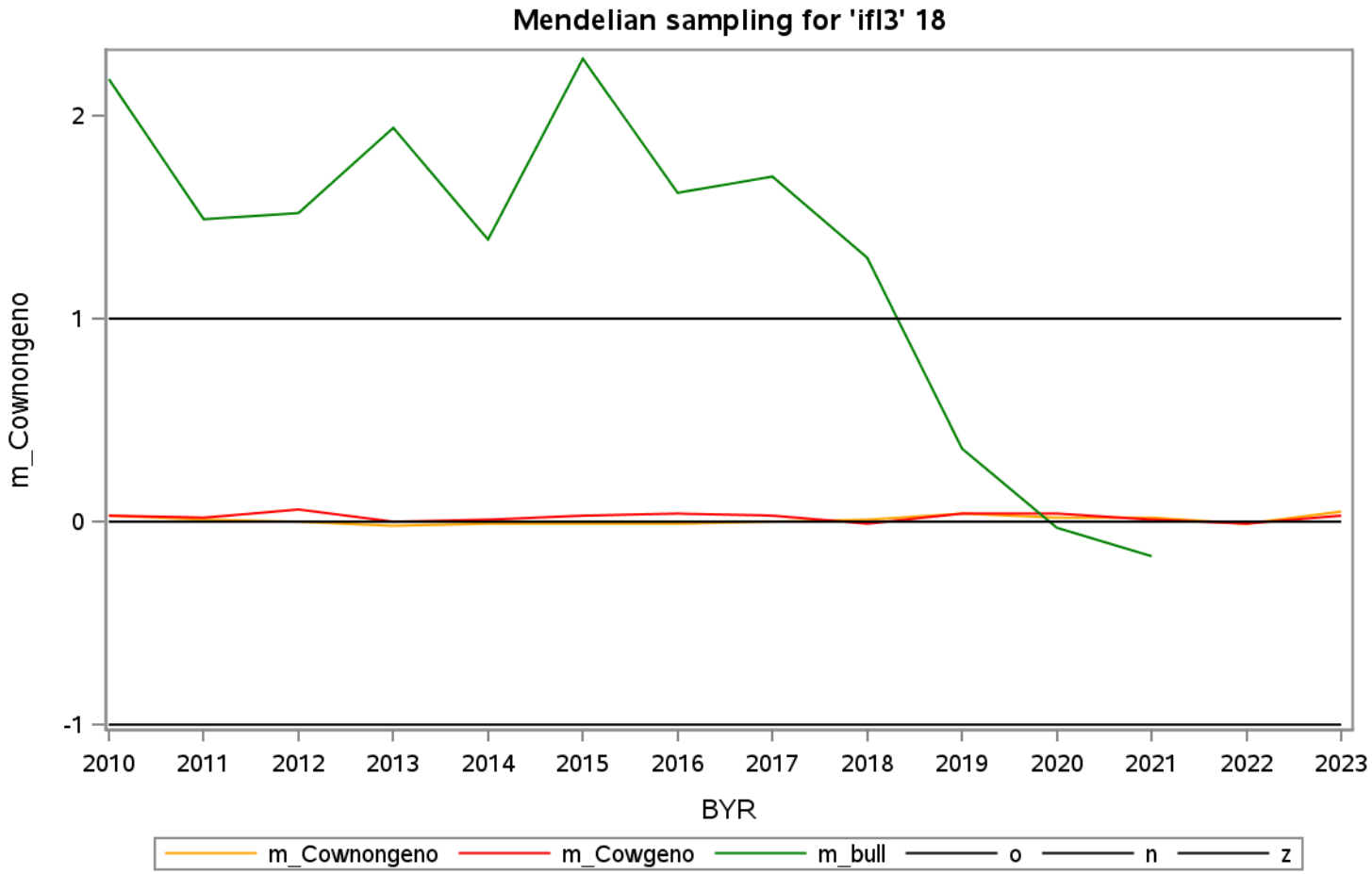
Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	-0.02	-0.07	2.11	191490	1121	177
2	2011	-0.03	-0.03	1.48	191310	2453	193
3	2012	-0.05	0.00	1.21	188466	3904	217
4	2013	-0.02	0.05	1.98	180976	6595	170
5	2014	0.01	0.05	1.25	179690	7217	130
6	2015	0.01	0.06	2.04	167519	9214	100
7	2016	0.02	0.07	1.41	159985	14948	98
8	2017	0.02	0.06	1.57	134616	21444	139
9	2018	0.05	0.04	1.46	117677	29078	123
10	2019	0.00	0.00	0.42	108799	32774	79
11	2020	-0.02	-0.02	0.19	104542	37902	48
12	2021	-0.01	-0.03	0.00	90434	35313	6
13	2022	-0.04	-0.05	.	58899	29466	.
14	2023	-0.02	-0.03	.	2062	1166	.



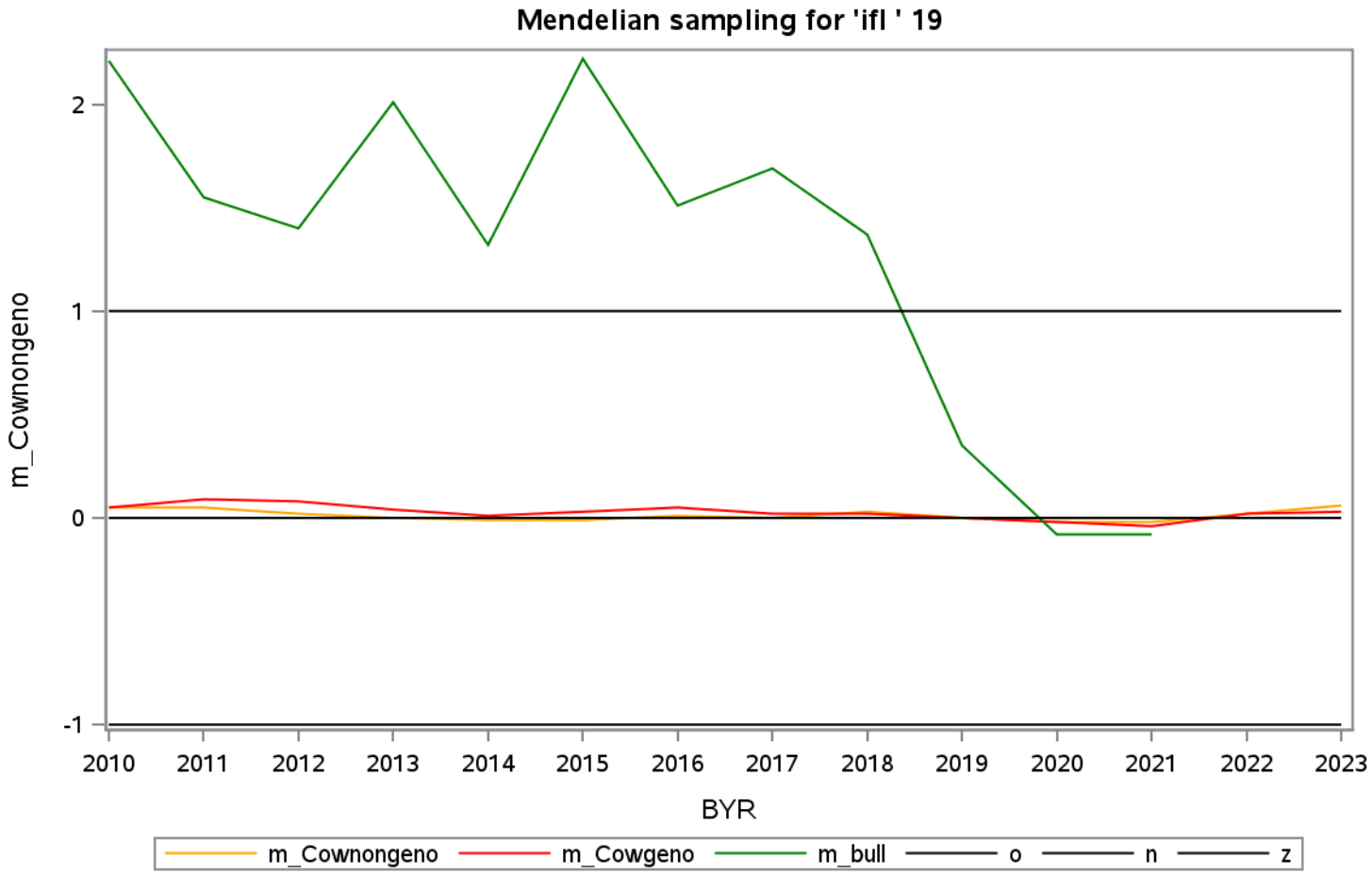
Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	0.03	0.00	2.23	191490	1121	177
2	2011	0.02	0.05	1.59	191310	2453	193
3	2012	0.02	0.07	1.44	188466	3904	217
4	2013	0.02	0.08	2.04	180976	6595	170
5	2014	0.02	0.05	1.38	179690	7217	130
6	2015	0.00	0.03	2.14	167519	9214	100
7	2016	0.00	0.04	1.44	159985	14948	98
8	2017	0.01	0.03	1.64	134616	21444	139
9	2018	0.00	-0.01	1.42	117677	29078	123
10	2019	0.01	0.01	0.49	108799	32774	79
11	2020	0.00	-0.01	0.02	104542	37902	48
12	2021	0.00	0.00	0.08	90434	35313	6
13	2022	-0.02	-0.01	.	58899	29466	.
14	2023	-0.03	-0.01	.	2062	1166	.



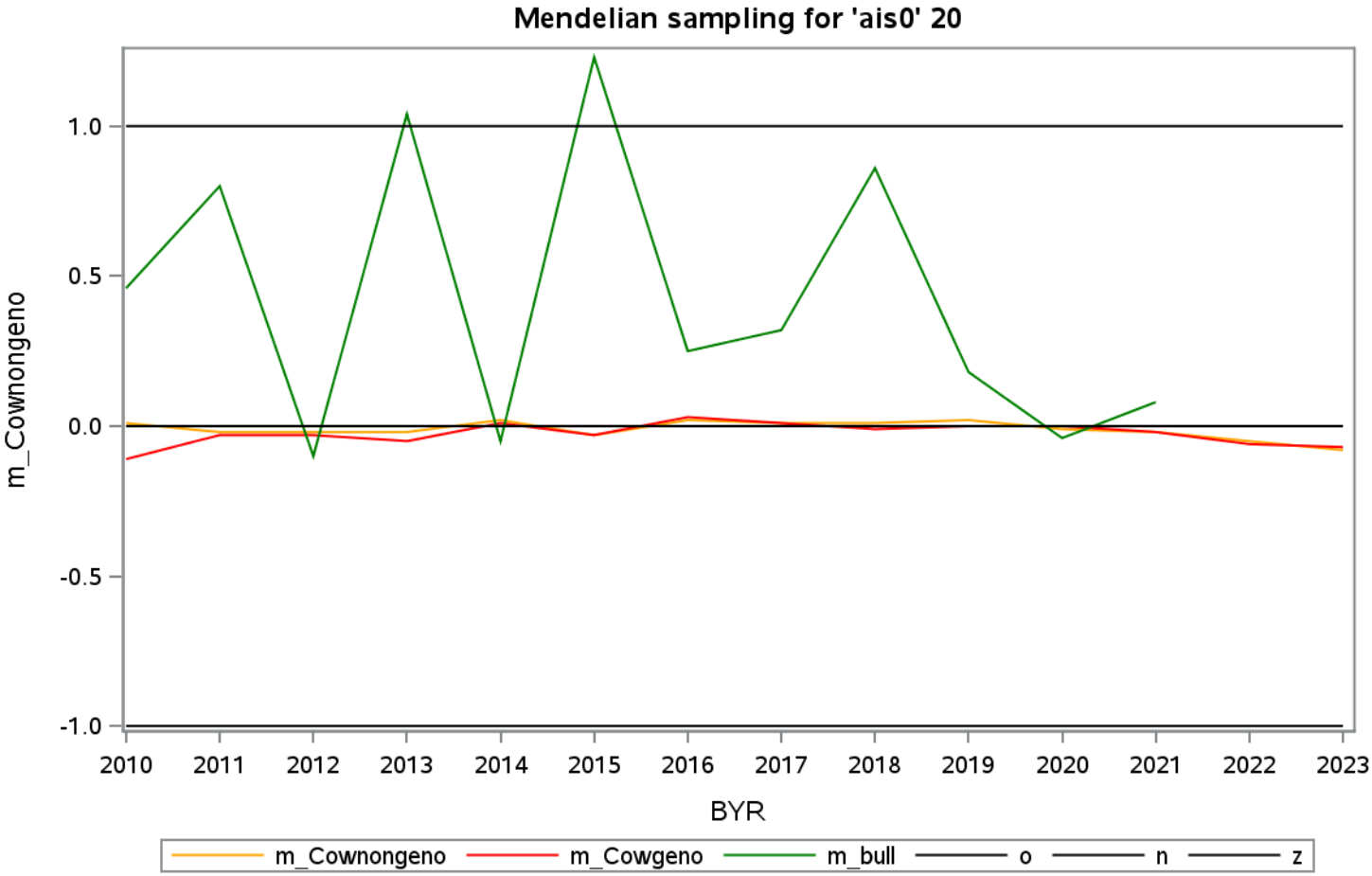
Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	0.03	0.03	2.18	191490	1121	177
2	2011	0.01	0.02	1.49	191310	2453	193
3	2012	0.00	0.06	1.52	188466	3904	217
4	2013	-0.02	0.00	1.94	180976	6595	170
5	2014	-0.01	0.01	1.39	179690	7217	130
6	2015	-0.01	0.03	2.28	167519	9214	100
7	2016	-0.01	0.04	1.62	159985	14948	98
8	2017	0.00	0.03	1.70	134616	21444	139
9	2018	0.01	-0.01	1.30	117677	29078	123
10	2019	0.04	0.04	0.36	108799	32774	79
11	2020	0.02	0.04	-0.03	104542	37902	48
12	2021	0.02	0.01	-0.17	90434	35313	6
13	2022	-0.01	-0.01	.	58899	29466	.
14	2023	0.05	0.03	.	2062	1166	.



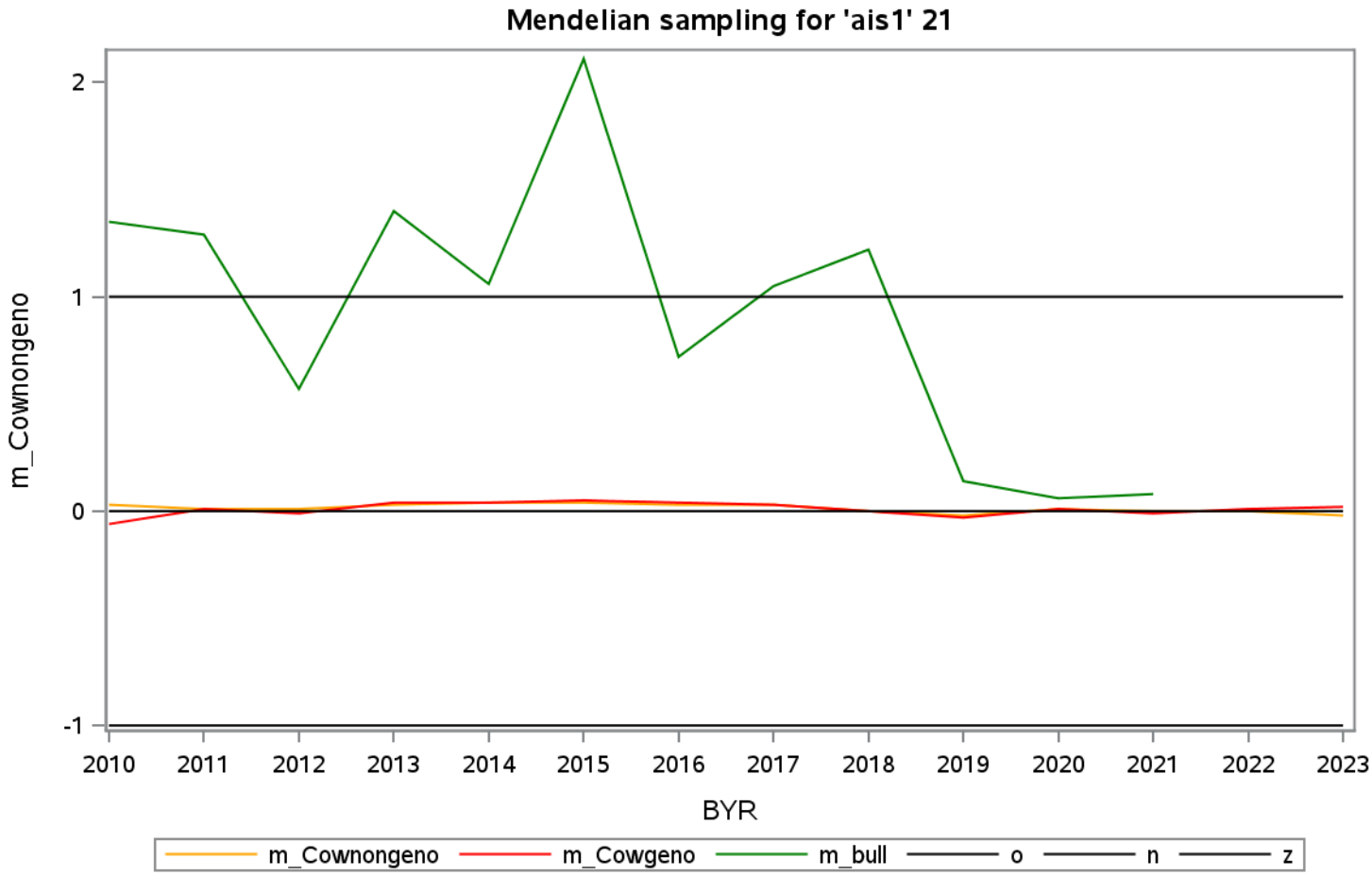
Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	0.05	0.05	2.21	191490	1121	177
2	2011	0.05	0.09	1.55	191310	2453	193
3	2012	0.02	0.08	1.40	188466	3904	217
4	2013	0.00	0.04	2.01	180976	6595	170
5	2014	-0.01	0.01	1.32	179690	7217	130
6	2015	-0.01	0.03	2.22	167519	9214	100
7	2016	0.01	0.05	1.51	159985	14948	98
8	2017	0.00	0.02	1.69	134616	21444	139
9	2018	0.03	0.02	1.37	117677	29078	123
10	2019	0.00	0.00	0.35	108799	32774	79
11	2020	-0.02	-0.02	-0.08	104542	37902	48
12	2021	-0.02	-0.04	-0.08	90434	35313	6
13	2022	0.02	0.02	.	58899	29466	.
14	2023	0.06	0.03	.	2062	1166	.



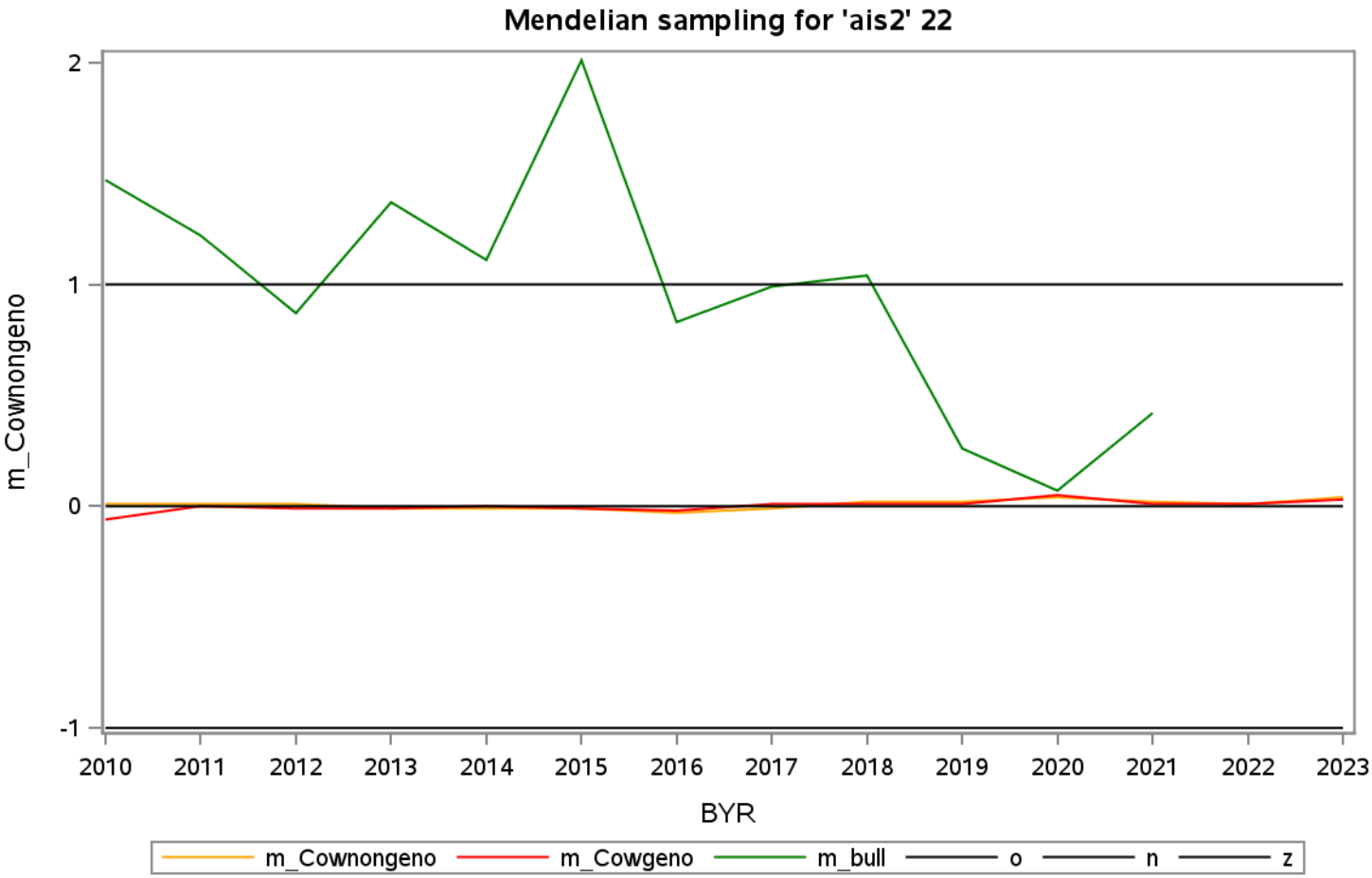
Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	0.01	-0.11	0.46	191490	1121	177
2	2011	-0.02	-0.03	0.80	191310	2453	193
3	2012	-0.02	-0.03	-0.10	188466	3904	217
4	2013	-0.02	-0.05	1.04	180976	6595	170
5	2014	0.02	0.01	-0.05	179690	7217	130
6	2015	-0.03	-0.03	1.23	167519	9214	100
7	2016	0.02	0.03	0.25	159985	14948	98
8	2017	0.01	0.01	0.32	134616	21444	139
9	2018	0.01	-0.01	0.86	117677	29078	123
10	2019	0.02	0.00	0.18	108799	32774	79
11	2020	-0.01	0.00	-0.04	104542	37902	48
12	2021	-0.02	-0.02	0.08	90434	35313	6
13	2022	-0.05	-0.06	.	58899	29466	.
14	2023	-0.08	-0.07	.	2062	1166	.



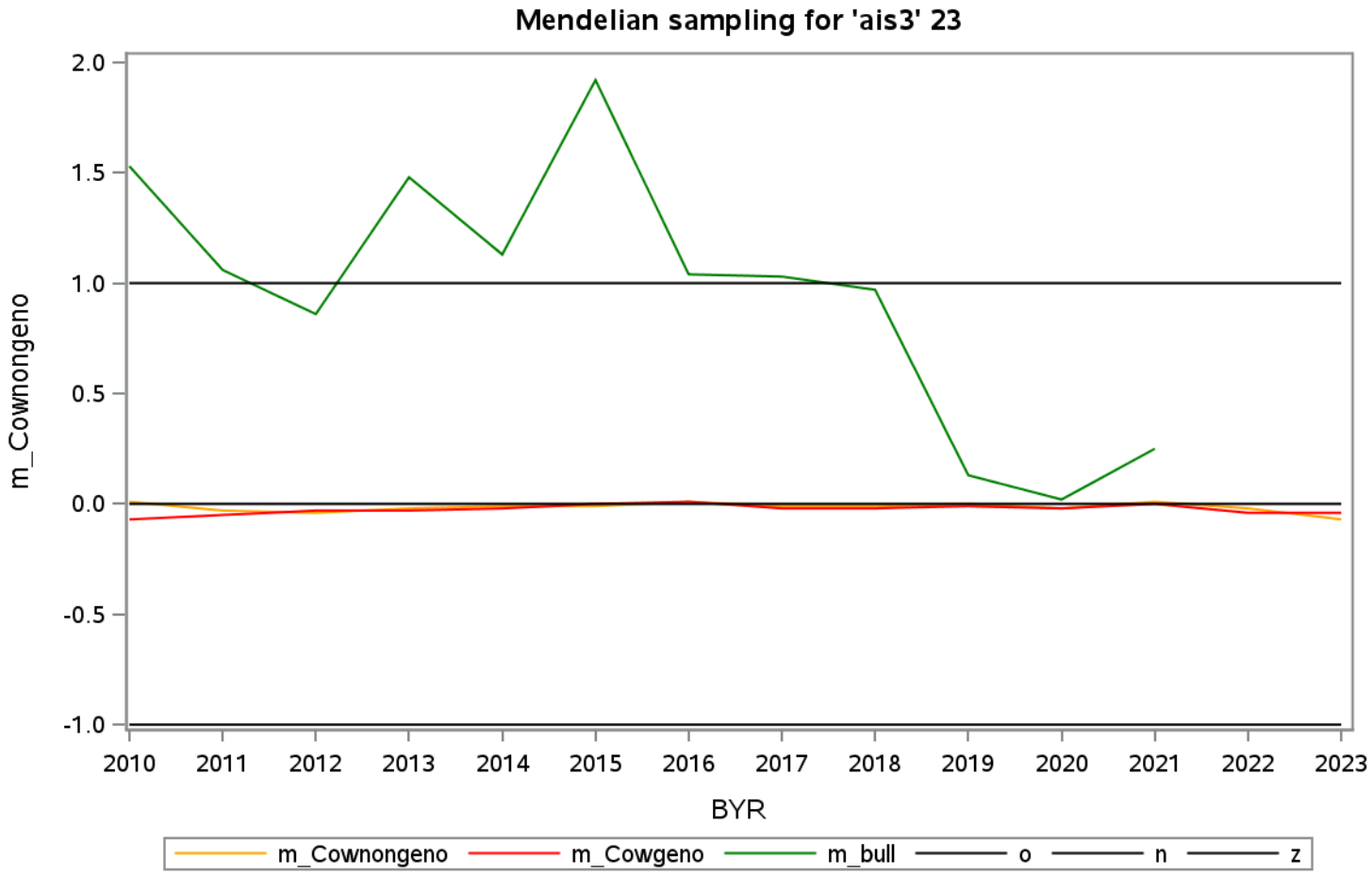
Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	0.03	-0.06	1.35	191490	1121	177
2	2011	0.01	0.01	1.29	191310	2453	193
3	2012	0.01	-0.01	0.57	188466	3904	217
4	2013	0.03	0.04	1.40	180976	6595	170
5	2014	0.04	0.04	1.06	179690	7217	130
6	2015	0.04	0.05	2.11	167519	9214	100
7	2016	0.03	0.04	0.72	159985	14948	98
8	2017	0.03	0.03	1.05	134616	21444	139
9	2018	0.00	0.00	1.22	117677	29078	123
10	2019	-0.02	-0.03	0.14	108799	32774	79
11	2020	0.01	0.01	0.06	104542	37902	48
12	2021	0.00	-0.01	0.08	90434	35313	6
13	2022	0.00	0.01	.	58899	29466	.
14	2023	-0.02	0.02	.	2062	1166	.



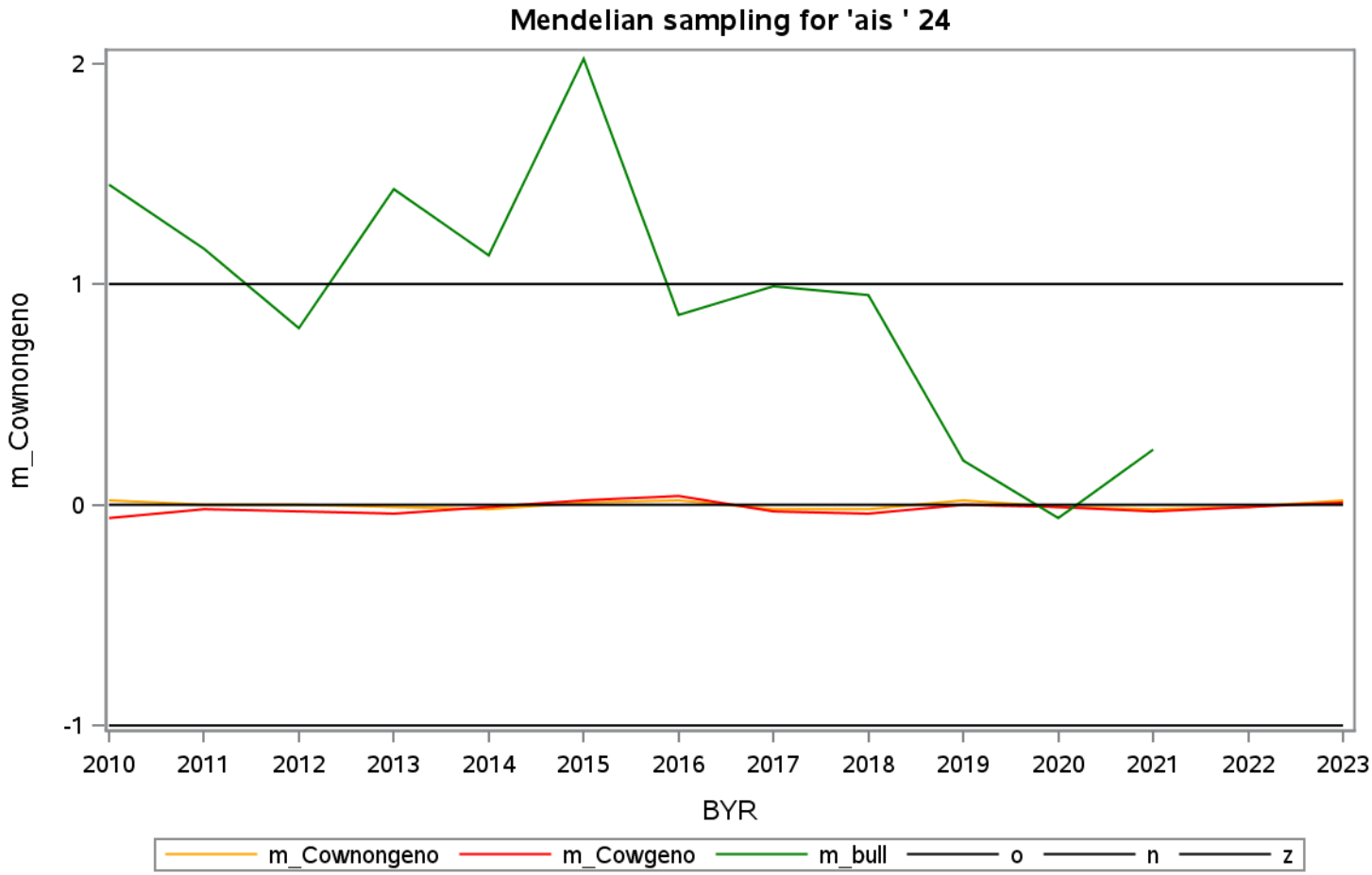
Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	0.01	-0.06	1.47	191490	1121	177
2	2011	0.01	0.00	1.22	191310	2453	193
3	2012	0.01	-0.01	0.87	188466	3904	217
4	2013	-0.01	-0.01	1.37	180976	6595	170
5	2014	-0.01	0.00	1.11	179690	7217	130
6	2015	-0.01	-0.01	2.01	167519	9214	100
7	2016	-0.03	-0.02	0.83	159985	14948	98
8	2017	-0.01	0.01	0.99	134616	21444	139
9	2018	0.02	0.01	1.04	117677	29078	123
10	2019	0.02	0.01	0.26	108799	32774	79
11	2020	0.04	0.05	0.07	104542	37902	48
12	2021	0.02	0.01	0.42	90434	35313	6
13	2022	0.01	0.01	.	58899	29466	.
14	2023	0.04	0.03	.	2062	1166	.



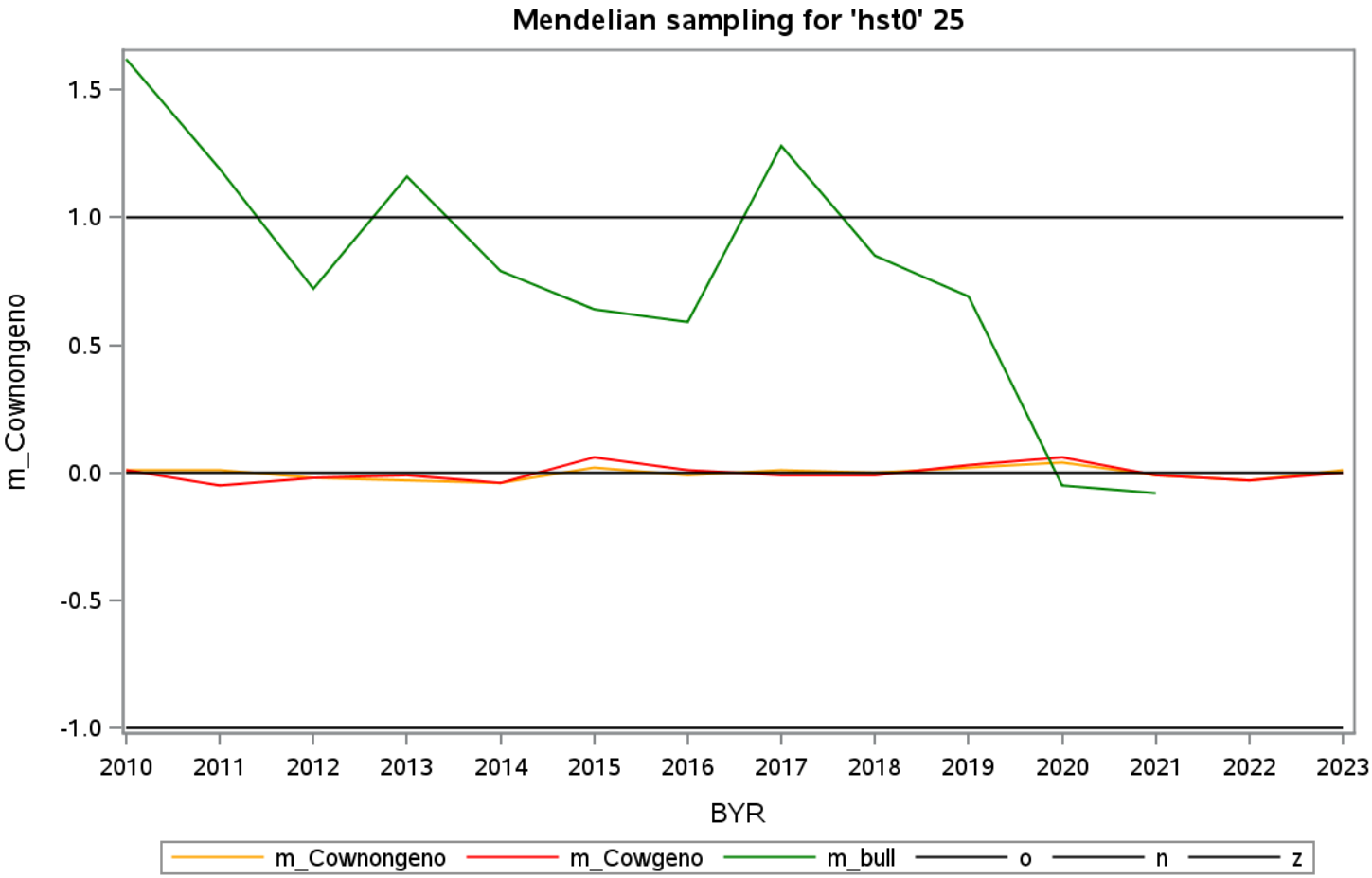
Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	0.01	-0.07	1.53	191490	1121	177
2	2011	-0.03	-0.05	1.06	191310	2453	193
3	2012	-0.04	-0.03	0.86	188466	3904	217
4	2013	-0.02	-0.03	1.48	180976	6595	170
5	2014	-0.01	-0.02	1.13	179690	7217	130
6	2015	-0.01	0.00	1.92	167519	9214	100
7	2016	0.01	0.01	1.04	159985	14948	98
8	2017	-0.01	-0.02	1.03	134616	21444	139
9	2018	-0.01	-0.02	0.97	117677	29078	123
10	2019	0.00	-0.01	0.13	108799	32774	79
11	2020	-0.02	-0.02	0.02	104542	37902	48
12	2021	0.01	0.00	0.25	90434	35313	6
13	2022	-0.02	-0.04	.	58899	29466	.
14	2023	-0.07	-0.04	.	2062	1166	.



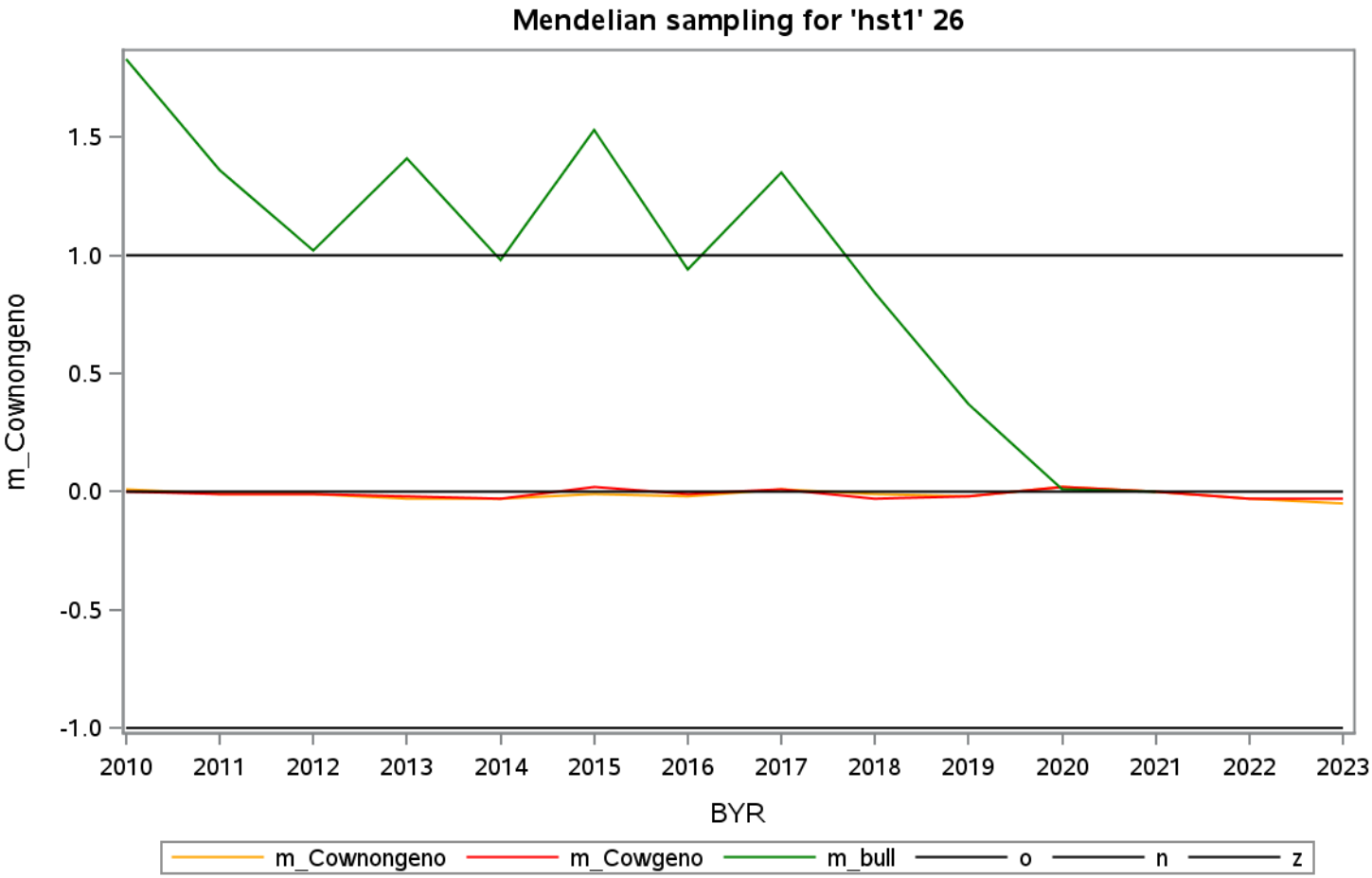
Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	0.02	-0.06	1.45	191490	1121	177
2	2011	0.00	-0.02	1.16	191310	2453	193
3	2012	0.00	-0.03	0.80	188466	3904	217
4	2013	-0.01	-0.04	1.43	180976	6595	170
5	2014	-0.02	-0.01	1.13	179690	7217	130
6	2015	0.01	0.02	2.02	167519	9214	100
7	2016	0.02	0.04	0.86	159985	14948	98
8	2017	-0.02	-0.03	0.99	134616	21444	139
9	2018	-0.02	-0.04	0.95	117677	29078	123
10	2019	0.02	0.00	0.20	108799	32774	79
11	2020	-0.01	-0.01	-0.06	104542	37902	48
12	2021	-0.02	-0.03	0.25	90434	35313	6
13	2022	-0.01	-0.01	.	58899	29466	.
14	2023	0.02	0.01	.	2062	1166	.



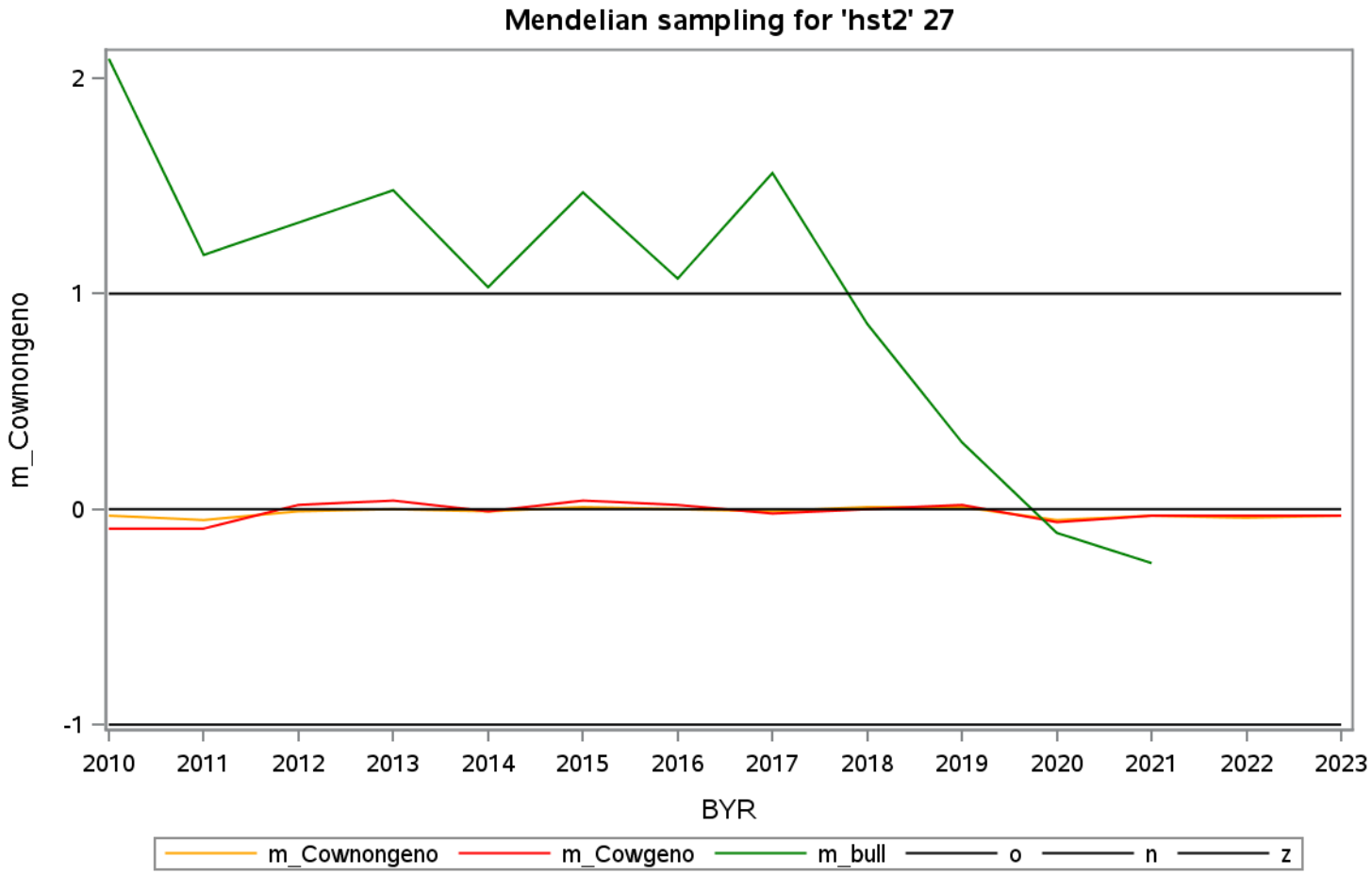
Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	0.01	0.01	1.62	191490	1121	177
2	2011	0.01	-0.05	1.19	191310	2453	193
3	2012	-0.02	-0.02	0.72	188466	3904	217
4	2013	-0.03	-0.01	1.16	180976	6595	170
5	2014	-0.04	-0.04	0.79	179690	7217	130
6	2015	0.02	0.06	0.64	167519	9214	100
7	2016	-0.01	0.01	0.59	159985	14948	98
8	2017	0.01	-0.01	1.28	134616	21444	139
9	2018	0.00	-0.01	0.85	117677	29078	123
10	2019	0.02	0.03	0.69	108799	32774	79
11	2020	0.04	0.06	-0.05	104542	37902	48
12	2021	-0.01	-0.01	-0.08	90434	35313	6
13	2022	-0.03	-0.03	.	58899	29466	.
14	2023	0.01	0.00	.	2062	1166	.



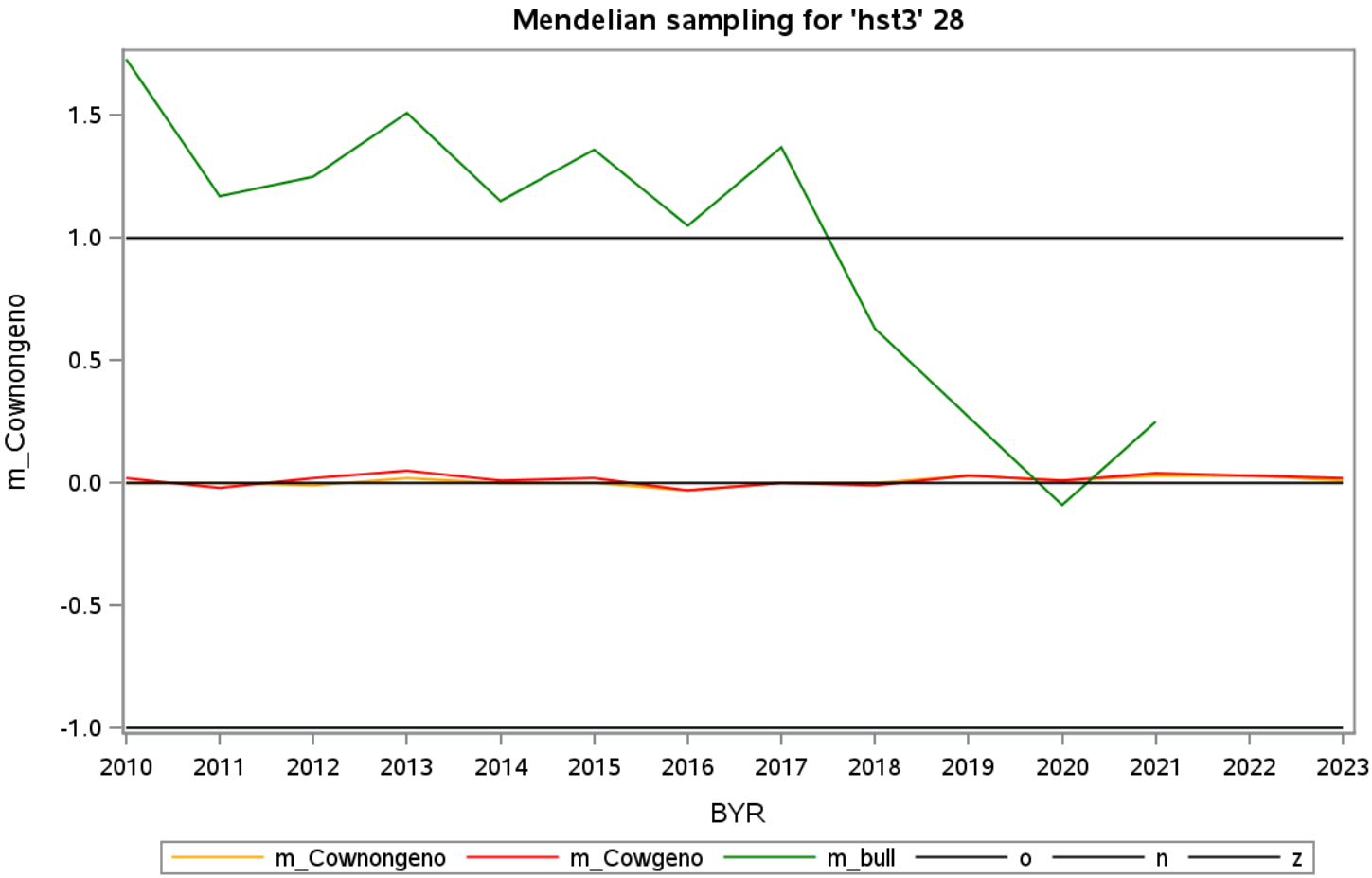
Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	0.01	0.00	1.83	191490	1121	177
2	2011	-0.01	-0.01	1.36	191310	2453	193
3	2012	-0.01	-0.01	1.02	188466	3904	217
4	2013	-0.03	-0.02	1.41	180976	6595	170
5	2014	-0.03	-0.03	0.98	179690	7217	130
6	2015	-0.01	0.02	1.53	167519	9214	100
7	2016	-0.02	-0.01	0.94	159985	14948	98
8	2017	0.01	0.01	1.35	134616	21444	139
9	2018	-0.01	-0.03	0.84	117677	29078	123
10	2019	-0.02	-0.02	0.37	108799	32774	79
11	2020	0.02	0.02	0.01	104542	37902	48
12	2021	0.00	0.00	0.00	90434	35313	6
13	2022	-0.03	-0.03	.	58899	29466	.
14	2023	-0.05	-0.03	.	2062	1166	.



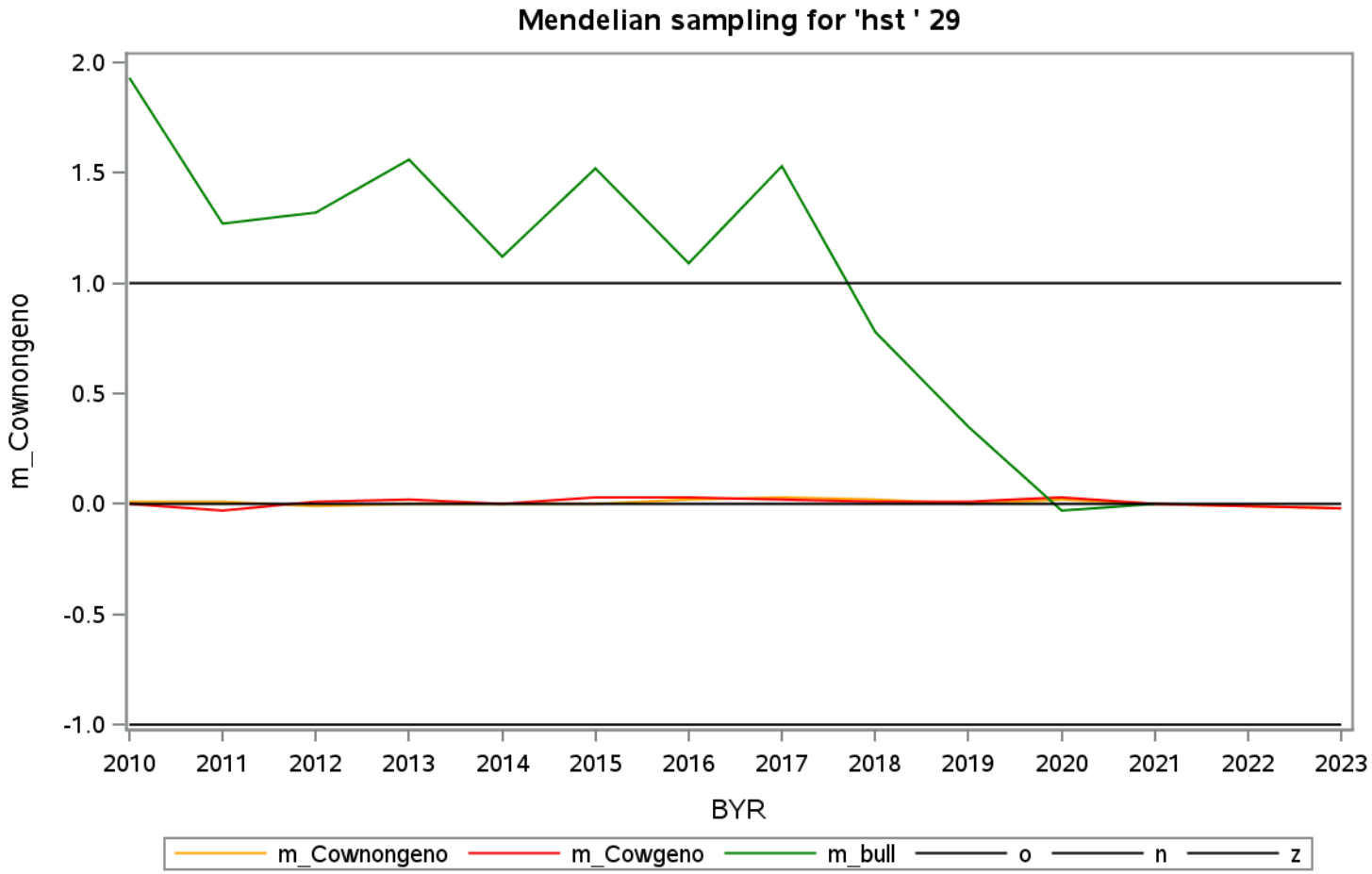
Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	-0.03	-0.09	2.09	191490	1121	177
2	2011	-0.05	-0.09	1.18	191310	2453	193
3	2012	-0.01	0.02	1.33	188466	3904	217
4	2013	0.00	0.04	1.48	180976	6595	170
5	2014	-0.01	-0.01	1.03	179690	7217	130
6	2015	0.01	0.04	1.47	167519	9214	100
7	2016	0.00	0.02	1.07	159985	14948	98
8	2017	-0.01	-0.02	1.56	134616	21444	139
9	2018	0.01	0.00	0.86	117677	29078	123
10	2019	0.01	0.02	0.31	108799	32774	79
11	2020	-0.05	-0.06	-0.11	104542	37902	48
12	2021	-0.03	-0.03	-0.25	90434	35313	6
13	2022	-0.04	-0.03	.	58899	29466	.
14	2023	-0.03	-0.03	.	2062	1166	.



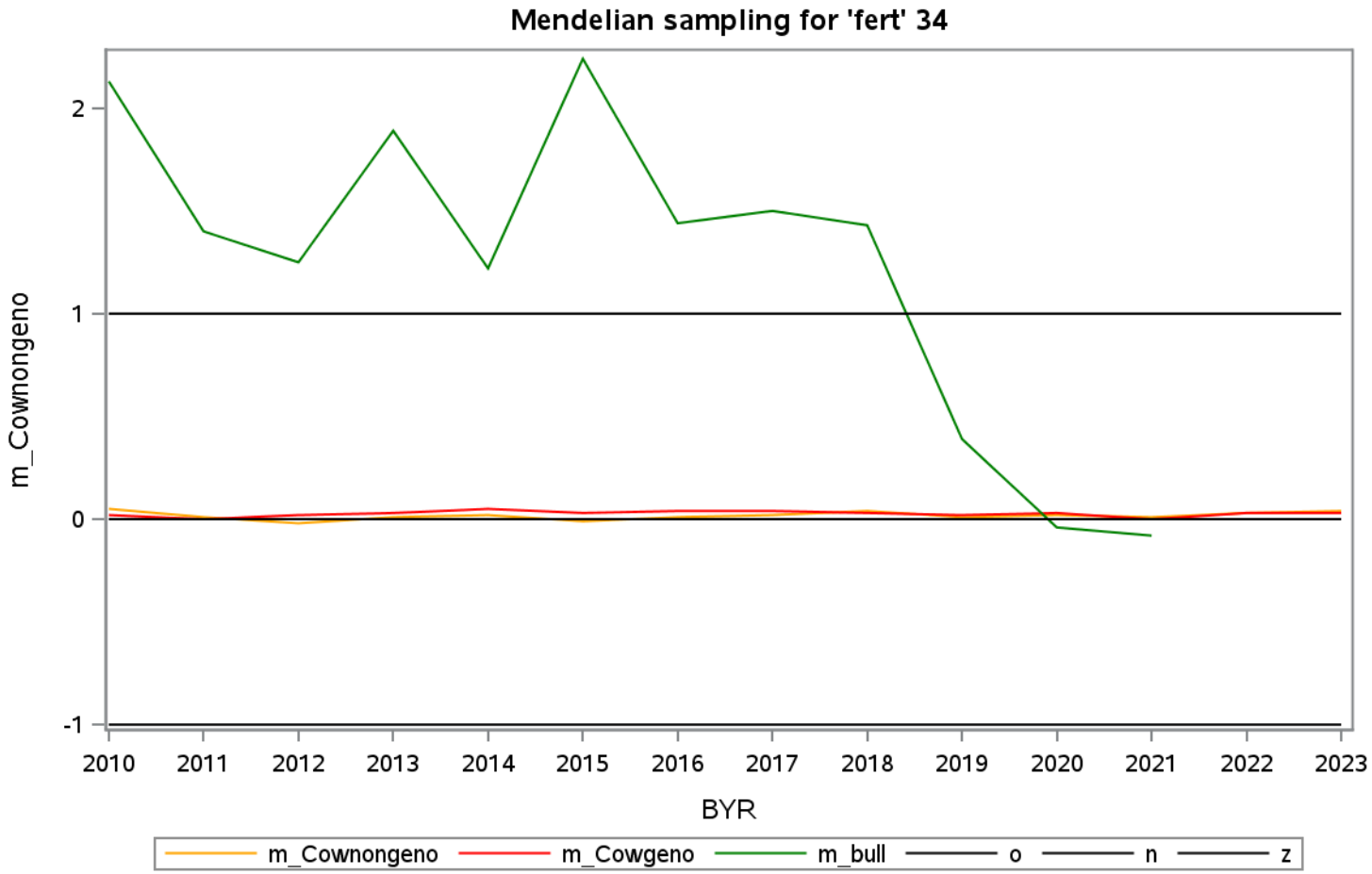
Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	0.00	0.02	1.73	191490	1121	177
2	2011	0.00	-0.02	1.17	191310	2453	193
3	2012	-0.01	0.02	1.25	188466	3904	217
4	2013	0.02	0.05	1.51	180976	6595	170
5	2014	0.00	0.01	1.15	179690	7217	130
6	2015	0.00	0.02	1.36	167519	9214	100
7	2016	-0.03	-0.03	1.05	159985	14948	98
8	2017	0.00	0.00	1.37	134616	21444	139
9	2018	0.00	-0.01	0.63	117677	29078	123
10	2019	0.03	0.03	0.27	108799	32774	79
11	2020	0.01	0.01	-0.09	104542	37902	48
12	2021	0.03	0.04	0.25	90434	35313	6
13	2022	0.03	0.03	.	58899	29466	.
14	2023	0.01	0.02	.	2062	1166	.



Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	0.01	0.00	1.93	191490	1121	177
2	2011	0.01	-0.03	1.27	191310	2453	193
3	2012	-0.01	0.01	1.32	188466	3904	217
4	2013	0.00	0.02	1.56	180976	6595	170
5	2014	0.00	0.00	1.12	179690	7217	130
6	2015	0.00	0.03	1.52	167519	9214	100
7	2016	0.02	0.03	1.09	159985	14948	98
8	2017	0.03	0.02	1.53	134616	21444	139
9	2018	0.02	0.01	0.78	117677	29078	123
10	2019	0.00	0.01	0.35	108799	32774	79
11	2020	0.02	0.03	-0.03	104542	37902	48
12	2021	0.00	0.00	0.00	90434	35313	6
13	2022	-0.01	-0.01	.	58899	29466	.
14	2023	-0.02	-0.02	.	2062	1166	.



Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	0.05	0.02	2.13	191490	1121	177
2	2011	0.01	0.00	1.40	191310	2453	193
3	2012	-0.02	0.02	1.25	188466	3904	217
4	2013	0.01	0.03	1.89	180976	6595	170
5	2014	0.02	0.05	1.22	179690	7217	130
6	2015	-0.01	0.03	2.24	167519	9214	100
7	2016	0.01	0.04	1.44	159985	14948	98
8	2017	0.02	0.04	1.50	134616	21444	139
9	2018	0.04	0.03	1.43	117677	29078	123
10	2019	0.01	0.02	0.39	108799	32774	79
11	2020	0.02	0.03	-0.04	104542	37902	48
12	2021	0.01	0.00	-0.08	90434	35313	6
13	2022	0.03	0.03	.	58899	29466	.
14	2023	0.04	0.03	.	2062	1166	.



HOL reliability for SS and traditional 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	cr0	207368	30.1	32.1	4.3	4.2	-1.9	3.2	0.72
2	2011	cr0	209169	30.7	32.3	4.2	4.1	-1.6	3.6	0.62
3	2012	cr0	211277	30.9	32.4	4.2	4.2	-1.5	3.8	0.59
4	2013	cr0	207036	31.2	32.4	4.4	4.1	-1.3	4.1	0.55
5	2014	cr0	207925	31.5	32.5	4.7	4.0	-1.0	4.4	0.50
6	2015	cr0	198640	31.7	32.3	4.9	4.0	-0.6	4.7	0.47
7	2016	cr0	192226	31.9	32.4	5.0	3.8	-0.5	4.8	0.45
8	2017	cr0	171167	31.7	32.3	4.8	3.9	-0.6	4.7	0.44
9	2018	cr0	164619	31.4	32.1	4.3	4.0	-0.7	4.5	0.43
10	2019	cr0	158325	30.8	31.7	3.9	4.2	-0.9	4.3	0.43
11	2020	cr0	161608	30.0	30.8	3.5	4.6	-0.8	4.2	0.48
12	2021	cr0	176721	29.2	29.4	3.1	5.2	-0.2	4.3	0.56
13	2022	cr0	86325	28.6	27.2	2.9	6.0	1.4	5.0	0.57
14	2010	cr	230877	35.4	34.9	6.3	4.3	0.4	4.6	0.68
15	2011	cr	231373	35.6	35.1	6.3	4.2	0.5	4.7	0.67
16	2012	cr	233090	35.7	35.1	6.4	4.3	0.5	4.8	0.65
17	2013	cr	227928	35.8	35.2	6.5	4.2	0.6	5.0	0.64
18	2014	cr	228540	36.0	35.2	6.6	4.1	0.8	5.2	0.62
19	2015	cr	219270	36.2	35.1	6.7	4.1	1.1	5.4	0.59
20	2016	cr	211704	36.2	35.2	6.6	4.0	1.1	5.4	0.58
21	2017	cr	189467	35.9	35.0	6.4	4.0	0.9	5.4	0.55
22	2018	cr	181053	35.4	34.7	6.0	4.1	0.6	5.1	0.53
23	2019	cr	172531	33.9	34.0	5.1	4.1	-0.1	4.8	0.48
24	2020	cr	174539	31.6	32.4	4.1	4.5	-0.8	4.4	0.49
25	2021	cr	181948	30.0	29.8	3.4	5.4	0.2	4.6	0.55
26	2022	cr	86331	29.2	26.3	3.1	6.3	3.0	5.4	0.52
27	2010	nrr0	196931	26.2	30.4	4.8	4.8	-4.2	2.4	0.88
28	2011	nrr0	198887	27.2	30.7	4.3	4.6	-3.6	2.8	0.81
29	2012	nrr0	200831	27.6	30.9	4.3	4.6	-3.3	3.1	0.76
30	2013	nrr0	197222	27.9	30.9	4.4	4.6	-3.0	3.3	0.72
31	2014	nrr0	198172	28.4	31.0	4.5	4.4	-2.6	3.7	0.66
32	2015	nrr0	189306	28.7	30.8	4.7	4.5	-2.2	4.0	0.62
33	2016	nrr0	183836	29.0	30.9	4.7	4.2	-1.9	4.1	0.59
34	2017	nrr0	163237	29.0	30.8	4.6	4.3	-1.8	4.0	0.59
35	2018	nrr0	156972	28.8	30.7	4.2	4.4	-1.9	3.8	0.61
36	2019	nrr0	151201	28.6	30.5	3.9	4.5	-1.9	3.7	0.63
37	2020	nrr0	153994	28.4	30.0	3.6	4.7	-1.6	3.5	0.68

HOL reliability for SS and traditional for nongenotyped females with phenotype

Obs	BYR	name	no	mean_ss	mean_e	std_ss	std_e	mean_dif	std_dif	corr_SS
38	2021	nrr0	170316	28.2	29.5	3.3	5.1	-1.3	3.6	0.72
39	2022	nrr0	123969	27.8	28.0	3.2	5.7	-0.2	4.1	0.72
40	2023	nrr0	233	26.8	24.7	3.7	6.9	2.2	5.0	0.71
41	2010	nrr	227039	27.4	32.7	4.3	4.5	-5.3	2.5	0.84
42	2011	nrr	227638	28.1	33.0	4.1	4.4	-4.8	2.8	0.78
43	2012	nrr	229187	28.5	33.1	4.1	4.4	-4.6	3.1	0.75
44	2013	nrr	224301	28.7	33.1	4.3	4.3	-4.4	3.3	0.71
45	2014	nrr	224963	29.1	33.2	4.4	4.2	-4.1	3.6	0.66
46	2015	nrr	215905	29.3	33.0	4.6	4.3	-3.8	3.9	0.62
47	2016	nrr	208762	29.5	33.1	4.7	4.1	-3.6	4.0	0.59
48	2017	nrr	186774	29.4	33.0	4.5	4.2	-3.6	3.9	0.59
49	2018	nrr	178662	29.1	32.8	4.0	4.2	-3.7	3.7	0.60
50	2019	nrr	170249	28.8	32.3	3.7	4.4	-3.5	3.6	0.63
51	2020	nrr	172596	28.4	31.2	3.6	4.7	-2.8	3.5	0.68
52	2021	nrr	180771	28.1	29.0	3.5	5.6	-0.9	4.2	0.66
53	2022	nrr	124068	27.8	24.0	3.5	6.6	3.8	5.6	0.52
54	2023	nrr	233	26.8	20.2	3.9	6.0	6.5	5.1	0.54
55	2010	icf	190701	30.8	36.9	4.1	3.9	-6.1	2.7	0.78
56	2011	icf	187622	31.3	37.1	4.2	3.8	-5.8	3.0	0.73
57	2012	icf	188197	31.5	37.2	4.3	3.9	-5.6	3.2	0.70
58	2013	icf	184975	31.7	37.2	4.5	3.8	-5.5	3.5	0.66
59	2014	icf	183746	32.1	37.3	4.8	3.7	-5.2	3.8	0.61
60	2015	icf	178465	32.2	37.1	4.9	3.7	-4.9	4.1	0.58
61	2016	icf	172299	32.4	37.2	5.0	3.6	-4.8	4.3	0.55
62	2017	icf	155773	32.2	37.0	4.7	3.6	-4.8	4.2	0.53
63	2018	icf	149509	31.7	36.8	4.2	3.6	-5.1	3.9	0.52
64	2019	icf	141685	31.0	36.2	3.8	3.7	-5.2	3.7	0.51
65	2020	icf	140207	29.9	34.9	3.4	3.9	-5.0	3.6	0.54
66	2021	icf	89672	29.3	33.2	3.3	4.5	-3.9	3.8	0.56
67	2022	icf	131	28.6	29.5	3.3	6.1	-1.0	5.4	0.47
68	2010	ifl0	188612	26.4	30.6	4.7	4.7	-4.1	2.4	0.87
69	2011	ifl0	190724	27.4	30.9	4.3	4.6	-3.6	2.8	0.79
70	2012	ifl0	193576	27.8	31.1	4.2	4.6	-3.3	3.1	0.75
71	2013	ifl0	190725	28.1	31.1	4.3	4.5	-3.0	3.4	0.71
72	2014	ifl0	192388	28.5	31.2	4.5	4.4	-2.7	3.7	0.64
73	2015	ifl0	183705	28.8	31.0	4.7	4.4	-2.2	4.1	0.60
74	2016	ifl0	178499	29.1	31.1	4.8	4.1	-2.0	4.1	0.57

HOL reliability for SS and traditional for nongenotyped females with phenotype

Obs	BYR	name	no	mean_ss	mean_e	std_ss	std_e	mean_dif	std_dif	corr_SS
75	2017	ifl0	158533	29.1	31.0	4.6	4.2	-1.9	4.1	0.58
76	2018	ifl0	152603	28.9	30.9	4.2	4.3	-2.0	3.9	0.59
77	2019	ifl0	147347	28.7	30.7	3.9	4.5	-2.0	3.7	0.62
78	2020	ifl0	150362	28.5	30.3	3.6	4.6	-1.8	3.5	0.66
79	2021	ifl0	166240	28.3	29.9	3.3	5.0	-1.6	3.5	0.70
80	2022	ifl0	122078	27.9	28.6	3.1	5.6	-0.7	4.0	0.71
81	2023	ifl0	234	27.0	25.3	3.6	6.9	1.7	5.1	0.69
82	2010	ifl	225028	28.9	34.5	4.1	4.3	-5.7	2.5	0.82
83	2011	ifl	225519	29.5	34.7	4.1	4.2	-5.3	2.9	0.76
84	2012	ifl	227491	29.7	34.8	4.1	4.2	-5.1	3.1	0.73
85	2013	ifl	222682	29.9	34.8	4.3	4.2	-4.9	3.3	0.69
86	2014	ifl	223632	30.3	34.9	4.5	4.1	-4.6	3.6	0.64
87	2015	ifl	214604	30.4	34.8	4.7	4.1	-4.3	3.9	0.61
88	2016	ifl	207473	30.6	34.9	4.8	4.0	-4.2	4.1	0.58
89	2017	ifl	185750	30.5	34.7	4.6	4.0	-4.3	4.0	0.57
90	2018	ifl	177601	30.1	34.5	4.1	4.0	-4.4	3.8	0.57
91	2019	ifl	169264	29.7	34.0	3.7	4.1	-4.3	3.6	0.57
92	2020	ifl	171642	28.9	32.8	3.4	4.4	-3.8	3.6	0.61
93	2021	ifl	177650	28.5	30.5	3.4	5.2	-2.0	4.1	0.63
94	2022	ifl	122180	28.0	25.5	3.3	6.4	2.6	5.5	0.52
95	2023	ifl	234	27.1	21.8	3.8	6.2	5.3	5.2	0.55
96	2010	ais0	190875	27.2	32.3	4.2	4.2	-5.1	2.5	0.82
97	2011	ais0	192532	28.0	32.6	3.9	4.0	-4.6	2.8	0.74
98	2012	ais0	194939	28.3	32.7	3.9	4.0	-4.4	3.1	0.70
99	2013	ais0	191381	28.6	32.7	4.1	4.0	-4.2	3.4	0.65
100	2014	ais0	192375	29.0	32.8	4.4	3.9	-3.8	3.7	0.59
101	2015	ais0	184101	29.3	32.7	4.6	3.9	-3.4	4.1	0.55
102	2016	ais0	179092	29.6	32.8	4.7	3.7	-3.2	4.2	0.52
103	2017	ais0	158875	29.5	32.7	4.5	3.8	-3.2	4.1	0.52
104	2018	ais0	152630	29.3	32.6	4.0	3.8	-3.3	3.8	0.52
105	2019	ais0	147188	29.0	32.3	3.8	4.0	-3.3	3.7	0.55
106	2020	ais0	150165	28.8	31.8	3.4	4.2	-3.0	3.5	0.61
107	2021	ais0	167407	28.5	31.1	3.1	4.6	-2.6	3.4	0.67
108	2022	ais0	123919	28.1	29.7	3.0	5.2	-1.6	3.8	0.70
109	2023	ais0	233	27.3	26.6	3.4	6.6	0.7	4.9	0.70
110	2010	ais	225265	28.1	33.7	4.2	4.3	-5.5	2.5	0.83
111	2011	ais	225727	28.8	33.9	4.1	4.2	-5.1	2.8	0.77

HOL reliability for SS and traditional for nongenotyped females with phenotype

Obs	BYR	name	no	mean_ss	mean_e	std_ss	std_e	mean_dif	std_dif	corr_SS
112	2012	ais	227421	29.1	34.0	4.1	4.3	-4.9	3.1	0.74
113	2013	ais	222501	29.3	34.0	4.3	4.2	-4.7	3.3	0.70
114	2014	ais	223292	29.7	34.1	4.5	4.1	-4.4	3.6	0.65
115	2015	ais	214315	29.9	34.0	4.7	4.1	-4.1	3.9	0.61
116	2016	ais	207378	30.1	34.1	4.7	4.0	-4.0	4.0	0.59
117	2017	ais	185674	29.9	33.9	4.5	4.0	-4.0	3.9	0.58
118	2018	ais	177506	29.6	33.8	4.1	4.1	-4.1	3.7	0.59
119	2019	ais	169209	29.2	33.3	3.7	4.2	-4.1	3.6	0.60
120	2020	ais	171580	28.6	32.2	3.5	4.5	-3.6	3.5	0.65
121	2021	ais	178786	28.3	30.5	3.4	5.1	-2.1	3.7	0.67
122	2022	ais	123961	27.9	27.4	3.3	6.0	0.5	4.6	0.64
123	2023	ais	233	27.0	24.0	3.8	6.5	3.0	5.0	0.66
124	2010	hst0	37083	26.6	31.7	4.1	4.0	-5.1	2.3	0.84
125	2011	hst0	37878	27.4	31.9	3.9	3.8	-4.6	2.6	0.77
126	2012	hst0	37728	27.7	31.8	3.8	3.9	-4.2	2.8	0.72
127	2013	hst0	37039	27.9	31.8	3.8	3.8	-3.9	3.0	0.69
128	2014	hst0	35668	28.3	31.8	3.8	3.6	-3.5	3.2	0.63
129	2015	hst0	34740	28.5	31.5	3.9	3.7	-3.0	3.4	0.59
130	2016	hst0	33941	28.7	31.5	3.9	3.6	-2.8	3.4	0.58
131	2017	hst0	32054	28.7	31.4	3.9	3.6	-2.7	3.5	0.56
132	2018	hst0	32277	28.5	31.0	3.7	3.8	-2.5	3.5	0.57
133	2019	hst0	31492	28.2	30.6	3.5	3.8	-2.4	3.3	0.58
134	2020	hst0	32612	27.8	29.8	3.2	4.1	-2.0	3.2	0.65
135	2021	hst0	31613	27.3	28.2	3.0	4.5	-0.9	3.3	0.68
136	2022	hst0	19739	26.8	25.1	3.1	5.3	1.7	4.2	0.60
137	2023	hst0	2	.	.	.	.	.	.	-1.00
138	2010	hst	47885	27.0	32.7	4.1	4.0	-5.7	2.3	0.84
139	2011	hst	48535	27.7	32.9	3.9	3.9	-5.2	2.6	0.78
140	2012	hst	48258	28.0	32.8	3.9	4.0	-4.8	2.8	0.75
141	2013	hst	47261	28.2	32.7	3.8	3.9	-4.5	2.9	0.72
142	2014	hst	45780	28.6	32.8	3.8	3.7	-4.2	3.0	0.68
143	2015	hst	44629	28.8	32.6	3.8	3.8	-3.8	3.2	0.65
144	2016	hst	43311	28.9	32.7	3.9	3.7	-3.7	3.2	0.64
145	2017	hst	41219	28.9	32.5	3.8	3.7	-3.6	3.2	0.63
146	2018	hst	40737	28.7	32.1	3.7	3.9	-3.4	3.2	0.65
147	2019	hst	38756	28.3	31.6	3.5	3.9	-3.4	3.1	0.65
148	2020	hst	39875	27.5	30.4	3.4	4.3	-2.8	3.1	0.70

HOL reliability for SS and traditional for nongenotyped females with phenotype

Obs	BYR	name	no	mean_ss	mean_e	std_ss	std_e	mean_dif	std_dif	corr_SS
149	2021	hst	34726	26.9	27.7	3.5	5.1	-0.8	3.8	0.66
150	2022	hst	19745	26.4	22.7	3.6	6.1	3.7	5.2	0.53
151	2023	hst	2	.	.	.	.	.	.	-1.00
152	2010	icf	190701	30.6	36.7	4.2	4.0	-6.0	2.6	0.79
153	2011	icf	187622	31.2	36.9	4.2	3.9	-5.7	2.9	0.74
154	2012	icf	188197	31.4	36.9	4.3	4.0	-5.5	3.2	0.71
155	2013	icf	184975	31.6	37.0	4.5	3.9	-5.3	3.4	0.67
156	2014	icf	183746	32.0	37.0	4.8	3.8	-5.1	3.8	0.63
157	2015	icf	178465	32.1	36.9	5.0	3.8	-4.8	4.1	0.59
158	2016	icf	172299	32.3	37.0	5.0	3.7	-4.7	4.3	0.56
159	2017	icf	155773	32.1	36.8	4.8	3.7	-4.7	4.1	0.55
160	2018	icf	149509	31.6	36.6	4.2	3.7	-4.9	3.8	0.54
161	2019	icf	141685	30.9	36.0	3.8	3.8	-5.0	3.7	0.53
162	2020	icf	140207	29.8	34.5	3.4	4.0	-4.8	3.5	0.56
163	2021	icf	89672	29.1	32.7	3.4	4.6	-3.6	3.8	0.59
164	2022	icf	131	28.4	29.0	3.5	6.1	-0.6	5.3	0.49
165	2010	fert	190701	29.2	35.1	4.2	4.1	-5.9	2.6	0.80
166	2011	fert	187622	29.8	35.3	4.1	4.0	-5.5	3.0	0.73
167	2012	fert	188197	30.1	35.4	4.3	4.1	-5.3	3.2	0.70
168	2013	fert	184975	30.3	35.4	4.4	4.0	-5.1	3.5	0.66
169	2014	fert	183746	30.7	35.5	4.7	3.9	-4.8	3.9	0.61
170	2015	fert	178465	30.8	35.3	4.9	3.9	-4.5	4.2	0.57
171	2016	fert	172299	31.0	35.4	5.0	3.8	-4.4	4.3	0.54
172	2017	fert	155773	30.8	35.3	4.7	3.8	-4.4	4.2	0.54
173	2018	fert	149509	30.4	35.0	4.2	3.9	-4.6	3.9	0.54
174	2019	fert	141685	29.9	34.5	3.8	4.0	-4.6	3.7	0.54
175	2020	fert	140207	29.0	33.2	3.5	4.3	-4.1	3.6	0.59
176	2021	fert	89672	28.6	31.5	3.5	4.9	-2.8	3.8	0.63
177	2022	fert	131	27.8	28.1	3.7	6.1	-0.3	4.7	0.64

HOL reliability for SS and traditional for nongenotyped females with phenotype

Obs	diff	d_cr	d_nrr	d_icf	d_ifl	d_ais	d_hst	d_fert	p_cr	p_nrr	p_icf	p_ifl	p_ais	p_hst	p_fert
1	-12	.	.	2	.	.	.	.	.	.	0	.	.	.	.
2	-11	.	.	13	4	1	16	4	.	.	0	0	0	0	0
3	-10	.	16	817	84	34	287	84	.	0	0	0	0	0	0
4	-9	.	7715	81320	34350	15568	3438	34350	.	0	4	1	1	1	2
5	-8	7	166125	405073	328110	225494	24471	328108	0	6	21	13	9	5	17
6	-7	4222	346360	512097	419418	420242	67123	419173	0	13	26	16	16	12	21
7	-6	62276	408744	293443	398748	440880	93594	366774	2	16	15	16	17	17	19
8	-5	206343	416766	172273	374554	415301	91691	218387	8	16	9	15	16	17	11
9	-4	313834	326308	103059	261520	275220	69034	138310	12	13	5	10	11	13	7
10	-3	281241	205096	66536	152285	170694	47735	90560	11	8	3	6	7	9	5
11	-2	231721	142898	61446	115614	126591	35067	72679	9	6	3	5	5	6	4
12	-1	210865	106732	53966	89704	97756	27316	57009	8	4	3	4	4	5	3
13	0	189176	90088	56786	78780	82795	20631	58163	7	4	3	3	3	4	3
14	1	165573	75378	42671	62898	67381	14287	46954	6	3	2	2	3	3	2
15	2	143656	56149	24701	45830	48974	10004	31325	6	2	1	2	2	2	2
16	3	130107	39127	14607	35351	34293	7071	18666	5	2	1	1	1	1	1
17	4	116131	29693	10582	28563	24369	6056	13183	5	1	1	1	1	1	1
18	5	99321	29191	11062	21688	21351	5552	12134	4	1	1	1	1	1	1
19	6	82412	28539	14656	22895	22015	4155	14706	3	1	1	1	1	1	1
20	7	66342	21539	10987	18887	17718	3033	12027	3	1	1	1	1	1	1
21	8	54924	15967	5785	14073	11040	2345	6908	2	1	0	1	0	0	0
22	9	45300	12324	3718	10015	7496	2017	4341	2	0	0	0	0	0	0
23	10	37346	11338	4022	8898	6663	1596	4140	1	0	0	0	0	0	0
24	11	30457	9616	4569	8260	6480	1465	4648	1	0	0	0	0	0	0
25	12	23647	7244	2633	6221	4506	991	3219	1	0	0	0	0	0	0
26	13	18462	5017	1459	3871	2642	660	1679	1	0	0	0	0	0	0
27	14	13660	4174	1434	3195	2122	494	1486	1	0	0	0	0	0	0
28	15	11108	3150	1254	2471	1782	251	1403	0	0	0	0	0	0	0
29	16	8431	2101	651	1539	1147	149	851	0	0	0	0	0	0	0
30	17	6505	1307	437	943	721	99	524	0	0	0	0	0	0	0
31	18	4577	843	375	738	582	45	446	0	0	0	0	0	0	0
32	19	3375	619	195	475	355	19	274	0	0	0	0	0	0	0
33	20	2546	365	136	293	230	9	167	0	0	0	0	0	0	0
34	21	1728	263	87	184	153	8	112	0	0	0	0	0	0	0
35	22	1132	145	40	123	109	3	75	0	0	0	0	0	0	0
36	23	803	90	27	69	49	3	43	0	0	0	0	0	0	0
37	24	530	61	22	35	43	2	22	0	0	0	0	0	0	0

HOL reliability for SS and traditional for nongenotyped females with phenotype

Obs	diff	d_cr	d_nrr	d_icf	d_ifl	d_ais	d_hst	d_fert	p_cr	p_nrr	p_icf	p_ifl	p_ais	p_hst	p_fert
38	25	321	23	14	25	21	1	21	0	0	0	0	0	0	0
39	26	196	20	11	17	13	.	14	0	0	0	0	0	.	0
40	27	133	7	7	10	6	.	7	0	0	0	0	0	.	0
41	28	69	2	7	4	5	.	2	0	0	0	0	0	.	0
42	29	49	3	1	4	1	1	1	0	0	0	0	0	0	0
43	30	33	2	.	1	2	.	1	0	0	.	0	0	.	0
44	31	24	1	1	1	1	.	1	0	0	0	0	0	.	0
45	32	15	.	.	1	2	.	.	0	.	.	0	0	.	.
46	33	9	1	.	1	.	.	1	0	0	.	0	.	.	0
47	34	10	1	.	.	.	.	.	0	0	.	.	.	.	.
48	35	14	.	.	.	.	.	.	0	.	.	.	.	.	.
49	36	16	.	.	.	.	.	.	0	.	.	.	.	.	.
50	37	2	.	.	.	.	.	.	0	.	.	.	.	.	.
51	38	2	.	.	.	.	.	.	0	.	.	.	.	.	.

HOL reliability for SS and traditional 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	cr0	193	930	2893	83.4	72.7	5.5	10.9	10.7	5.5	0.99
2	2011	cr0	155	565	1191	84.5	75.8	5.6	9.1	8.7	4.2	0.95
3	2012	cr0	171	816	1446	85.8	77.3	5.9	11.5	8.4	5.8	0.99
4	2013	cr0	151	839	1538	85.7	77.4	6.1	11.7	8.4	5.7	0.99
5	2014	cr0	114	1260	1534	88.0	81.2	7.2	14.2	6.7	7.1	0.99
6	2015	cr0	83	1883	2315	90.2	85.7	6.5	12.1	4.4	5.7	0.99
7	2016	cr0	66	1805	2289	89.3	84.3	6.7	12.1	5.0	5.5	0.99
8	2017	cr0	66	1946	2315	89.8	84.0	6.6	12.9	5.8	6.4	0.99
9	2018	cr0	78	1815	2612	87.7	77.3	7.0	15.9	10.4	9.0	0.99
10	2019	cr0	56	1446	2204	84.2	66.8	9.3	19.5	17.4	10.4	0.99
11	2020	cr0	24	286	372	74.0	48.3	8.6	15.4	25.7	6.9	0.99
12	2010	cr	193	997	3073	92.3	81.1	3.2	8.3	11.2	5.1	0.99
13	2011	cr	155	611	1268	93.2	83.8	3.8	7.0	9.4	3.9	0.91
14	2012	cr	171	883	1546	93.8	84.7	3.3	8.7	9.1	5.4	0.99
15	2013	cr	151	908	1638	93.8	84.8	3.2	8.6	9.1	5.4	0.99
16	2014	cr	114	1352	1629	94.7	87.3	4.2	11.1	7.4	6.9	1.00
17	2015	cr	83	2005	2443	96.0	90.6	3.3	8.8	5.4	5.5	0.99
18	2016	cr	66	1909	2398	95.4	89.6	3.7	9.1	5.8	5.5	0.99
19	2017	cr	66	2043	2405	94.2	88.2	3.9	10.2	6.0	6.3	0.99
20	2018	cr	78	1871	2669	89.3	79.0	5.7	15.4	10.3	9.8	0.98
21	2019	cr	56	1453	2215	77.5	59.4	7.0	19.5	18.1	13.4	0.91
22	2020	cr	24	286	372	70.6	41.2	2.1	10.4	29.4	8.5	0.92
23	2010	nrr0	193	892	2781	71.7	66.5	8.9	12.6	5.3	4.0	0.99
24	2011	nrr0	155	540	1143	73.3	69.5	8.2	10.6	3.8	3.0	0.98
25	2012	nrr0	171	782	1387	75.4	71.6	9.5	13.5	3.8	4.3	0.99
26	2013	nrr0	151	804	1475	75.3	71.7	9.8	13.9	3.5	4.3	0.99
27	2014	nrr0	114	1214	1480	79.0	76.8	11.5	16.2	2.2	5.1	0.99
28	2015	nrr0	83	1812	2234	82.3	81.9	10.5	14.2	0.4	4.1	0.99
29	2016	nrr0	66	1737	2208	81.0	80.3	10.9	14.4	0.7	3.8	0.99
30	2017	nrr0	66	1877	2239	81.5	81.2	10.9	14.6	0.4	4.1	0.99
31	2018	nrr0	78	1769	2558	78.9	76.9	11.1	16.0	2.0	5.3	0.99
32	2019	nrr0	56	1632	2406	76.6	72.5	12.4	18.3	4.1	6.2	0.99
33	2020	nrr0	37	483	773	65.6	55.4	11.9	19.9	10.2	8.1	1.00
34	2010	nrr	193	984	3034	78.8	75.6	7.6	10.1	3.2	2.9	0.99
35	2011	nrr	155	602	1250	80.4	78.6	6.9	8.4	1.8	2.2	0.98
36	2012	nrr	171	871	1525	82.0	80.0	7.8	10.6	2.1	3.2	0.99
37	2013	nrr	151	896	1619	82.0	80.1	7.9	10.6	1.9	3.0	0.99

HOL reliability for SS and traditional 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	2014	nrr	114	1336	1612	84.7	83.5	9.5	13.2	1.2	4.2	0.98
39	2015	nrr	83	1983	2421	87.5	87.7	8.4	10.8	-0.2	2.8	0.99
40	2016	nrr	66	1889	2375	86.1	86.5	8.7	10.9	-0.4	2.7	0.99
41	2017	nrr	66	2024	2385	83.1	85.6	8.5	11.9	-2.5	4.3	0.97
42	2018	nrr	78	1870	2676	74.7	77.1	8.6	16.0	-2.4	8.2	0.95
43	2019	nrr	56	1650	2436	62.0	56.3	8.0	20.1	5.7	12.8	0.95
44	2020	nrr	37	483	773	53.6	37.5	1.8	8.2	16.1	8.2	0.12
45	2010	icf	193	807	2493	86.6	83.4	5.3	7.4	3.2	2.4	0.99
46	2011	icf	155	494	1025	88.1	85.9	5.1	6.2	2.2	1.6	0.98
47	2012	icf	171	718	1261	89.1	86.7	5.4	7.8	2.4	2.7	0.98
48	2013	icf	151	741	1348	89.2	86.9	5.4	7.5	2.3	2.3	0.99
49	2014	icf	113	1114	1336	91.0	89.2	6.4	9.4	1.8	3.2	0.99
50	2015	icf	83	1650	2025	92.8	92.0	5.6	7.8	0.8	2.5	0.98
51	2016	icf	66	1568	1965	92.1	91.4	5.9	8.0	0.7	2.5	0.98
52	2017	icf	66	1650	1948	90.3	90.8	5.9	8.4	-0.5	3.1	0.97
53	2018	icf	78	1207	1736	84.7	84.6	6.6	12.2	0.2	5.9	0.98
54	2019	icf	35	485	812	76.7	69.9	8.4	18.7	6.8	10.4	0.99
55	2010	ifl0	193	865	2703	73.4	67.1	9.2	12.4	6.3	3.5	0.99
56	2011	ifl0	155	523	1109	75.2	70.2	8.4	10.5	5.0	2.7	0.98
57	2012	ifl0	171	760	1348	77.2	72.2	9.7	13.3	5.0	3.9	0.99
58	2013	ifl0	151	780	1431	77.2	72.3	10.0	13.7	4.9	3.9	0.99
59	2014	ifl0	114	1182	1442	81.0	77.4	11.6	16.1	3.6	4.8	0.99
60	2015	ifl0	83	1762	2175	84.5	82.3	10.6	14.0	2.2	3.7	0.99
61	2016	ifl0	66	1695	2154	83.3	81.0	11.0	14.0	2.3	3.3	0.99
62	2017	ifl0	66	1834	2191	84.0	81.8	10.9	14.3	2.2	3.6	0.99
63	2018	ifl0	78	1732	2505	81.5	77.8	11.4	15.7	3.7	4.6	0.99
64	2019	ifl0	56	1604	2364	79.9	74.4	12.3	17.6	5.5	5.6	0.99
65	2020	ifl0	37	479	767	68.7	57.4	13.0	20.3	11.4	7.4	1.00
66	2010	ifl	193	978	3016	83.5	80.1	6.3	8.6	3.4	2.6	0.99
67	2011	ifl	155	598	1243	85.0	82.9	5.9	7.2	2.2	1.9	0.98
68	2012	ifl	171	866	1517	86.3	83.9	6.5	9.0	2.4	2.8	0.99
69	2013	ifl	151	890	1609	86.3	84.0	6.5	8.9	2.3	2.6	0.99
70	2014	ifl	114	1329	1603	88.5	86.6	7.9	11.4	1.9	3.9	0.98
71	2015	ifl	83	1972	2408	90.9	90.3	6.8	9.0	0.7	2.6	0.98
72	2016	ifl	66	1878	2360	90.0	89.4	7.0	9.3	0.5	2.6	0.99
73	2017	ifl	66	2012	2371	88.0	88.6	7.3	9.9	-0.6	3.2	0.98
74	2018	ifl	78	1850	2646	81.1	81.2	8.3	14.1	-0.1	6.5	0.97

HOL reliability for SS and traditional 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	2019	ifl	56	1625	2398	67.9	60.2	8.9	20.2	7.7	12.2	0.94
76	2020	ifl	37	479	767	58.7	40.2	1.6	10.0	18.5	10.1	0.05
77	2010	ais0	193	872	2720	77.2	73.0	8.0	10.8	4.3	3.2	0.99
78	2011	ais0	155	527	1119	78.8	76.1	7.4	9.1	2.7	2.3	0.98
79	2012	ais0	171	765	1359	80.6	77.7	8.4	11.4	3.0	3.4	0.99
80	2013	ais0	151	787	1443	80.6	77.7	8.7	11.6	2.9	3.2	0.99
81	2014	ais0	114	1192	1453	83.8	81.7	10.2	14.1	2.1	4.4	0.99
82	2015	ais0	83	1777	2192	87.0	86.3	9.2	11.9	0.8	3.1	0.99
83	2016	ais0	66	1705	2169	85.8	85.0	9.5	12.0	0.8	3.0	0.99
84	2017	ais0	66	1845	2206	86.4	85.4	9.5	12.2	1.0	3.0	0.99
85	2018	ais0	78	1747	2529	84.1	81.1	10.2	14.0	2.9	4.2	0.99
86	2019	ais0	56	1626	2397	82.3	77.1	11.3	16.5	5.1	5.4	0.99
87	2020	ais0	37	483	774	71.6	59.8	12.6	20.2	11.8	7.7	1.00
88	2010	ais	193	978	3017	81.4	78.1	6.9	9.3	3.3	2.7	0.99
89	2011	ais	155	598	1244	83.1	81.1	6.4	7.8	2.0	2.0	0.98
90	2012	ais	171	867	1518	84.6	82.2	7.2	9.7	2.4	2.9	0.99
91	2013	ais	151	891	1611	84.6	82.4	7.2	9.6	2.3	2.6	0.99
92	2014	ais	114	1331	1605	87.0	85.3	8.7	12.2	1.7	4.0	0.98
93	2015	ais	83	1975	2412	89.6	89.2	7.6	9.8	0.4	2.6	0.99
94	2016	ais	66	1881	2365	88.4	88.2	7.8	10.0	0.2	2.6	0.99
95	2017	ais	66	2015	2376	85.6	87.6	7.8	10.7	-2.0	3.8	0.96
96	2018	ais	78	1861	2663	77.6	80.5	7.8	14.4	-2.9	7.5	0.94
97	2019	ais	56	1645	2427	66.9	67.1	6.9	19.3	-0.2	13.5	0.88
98	2020	ais	37	483	774	58.7	49.0	2.5	16.7	9.7	15.0	0.76
99	2010	hst0	59	430	755	72.7	78.6	11.1	14.1	-5.9	7.4	0.85
100	2011	hst0	60	227	273	69.2	75.6	10.7	13.1	-6.4	6.4	0.87
101	2012	hst0	69	288	346	71.4	80.9	10.6	12.7	-9.6	7.7	0.80
102	2013	hst0	80	260	390	70.1	78.6	10.1	13.0	-8.5	7.9	0.79
103	2014	hst0	72	237	259	69.6	81.8	10.5	13.3	-12.2	7.2	0.84
104	2015	hst0	72	305	398	69.4	81.3	12.5	14.3	-11.9	7.8	0.84
105	2016	hst0	60	288	432	67.4	79.1	12.4	14.1	-11.7	6.9	0.87
106	2017	hst0	58	325	438	67.6	79.8	13.1	14.3	-12.2	8.3	0.82
107	2018	hst0	67	271	408	64.6	72.3	12.4	17.3	-7.6	8.7	0.88
108	2019	hst0	44	246	347	63.0	60.5	11.5	17.2	2.5	7.3	0.95
109	2020	hst0	13	92	103	52.2	44.4	8.3	11.5	7.8	4.1	0.97
110	2010	hst	60	530	924	74.6	82.2	10.3	12.6	-7.7	7.0	0.83
111	2011	hst	60	289	341	71.8	80.3	9.8	11.5	-8.6	5.9	0.86

HOL reliability for SS and traditional 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	2012	hst	71	358	429	73.9	85.5	9.6	10.6	-11.6	7.7	0.71
113	2013	hst	80	329	482	72.8	83.2	9.0	11.3	-10.4	7.3	0.76
114	2014	hst	72	298	321	72.4	86.2	9.2	11.4	-13.8	6.6	0.81
115	2015	hst	73	371	484	71.4	85.6	11.2	12.0	-14.2	7.3	0.80
116	2016	hst	62	338	507	68.7	83.4	10.5	12.2	-14.7	6.8	0.83
117	2017	hst	59	376	502	65.8	83.7	9.8	12.5	-17.9	7.9	0.78
118	2018	hst	68	301	450	58.8	74.5	7.6	16.5	-15.7	10.8	0.86
119	2019	hst	44	250	353	51.4	54.1	5.6	18.9	-2.7	13.9	0.93
120	2020	hst	13	92	103	43.7	34.8	2.3	6.9	8.9	5.6	0.69
121	2010	icf	193	807	2493	86.3	82.9	5.4	7.6	3.4	2.4	0.99
122	2011	icf	155	494	1025	87.8	85.6	5.2	6.3	2.2	1.7	0.98
123	2012	icf	171	718	1261	88.8	86.3	5.5	8.0	2.5	2.7	0.98
124	2013	icf	151	741	1348	88.9	86.5	5.6	7.7	2.4	2.3	0.99
125	2014	icf	113	1114	1336	90.8	88.9	6.6	9.6	1.9	3.2	0.99
126	2015	icf	83	1650	2025	92.8	91.8	5.7	7.9	1.0	2.6	0.98
127	2016	icf	66	1568	1965	92.0	91.1	6.0	8.2	0.8	2.5	0.98
128	2017	icf	66	1650	1948	90.0	90.3	6.1	8.7	-0.3	3.1	0.97
129	2018	icf	78	1207	1736	83.3	83.4	7.0	12.9	-0.1	6.5	0.96
130	2019	icf	35	485	812	74.8	68.7	7.7	18.7	6.1	11.0	0.99
131	2010	fert	193	807	2493	83.5	80.1	6.3	8.6	3.4	2.6	0.99
132	2011	fert	155	494	1025	85.0	82.9	5.9	7.2	2.2	1.9	0.98
133	2012	fert	171	718	1261	86.3	83.9	6.5	9.0	2.4	2.8	0.99
134	2013	fert	151	741	1348	86.3	84.0	6.5	8.9	2.3	2.6	0.99
135	2014	fert	113	1114	1336	88.7	87.0	7.7	10.8	1.7	3.4	0.99
136	2015	fert	83	1650	2025	90.9	90.3	6.8	9.0	0.7	2.6	0.98
137	2016	fert	66	1568	1965	90.0	89.4	7.0	9.3	0.5	2.6	0.99
138	2017	fert	66	1650	1948	88.0	88.6	7.3	9.9	-0.6	3.2	0.98
139	2018	fert	78	1207	1736	81.1	81.2	8.3	14.1	-0.1	6.5	0.97
140	2019	fert	35	485	812	72.5	69.7	8.2	18.1	2.8	10.4	0.96

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

Obs	diff	d_cr	d_nrr	d_icf	d_ifl	d_ais	d_hst	d_fert	p_cr	p_nrr	p_icf	p_ifl	p_ais	p_hst	p_fert
1	-36	.	.	.	.	.	1	.	.	.	.	.	.	0	.
2	-35	.	.	.	.	.	1	.	.	.	.	.	.	0	.
3	-34	.	.	.	.	.	2	.	.	.	.	.	.	1	.
4	-33	.	.	.	.	.	1	.	.	.	.	.	.	0	.
5	-32	.	.	.	.	.	9	.	.	.	.	.	.	3	.
6	-31	.	.	.	.	.	1	.	.	.	.	.	.	0	.
7	-30	.	.	.	.	.	3	.	.	.	.	.	.	1	.
8	-29	.	.	.	.	.	5	.	.	.	.	.	.	2	.
9	-28	.	.	.	.	.	6	.	.	.	.	.	.	2	.
10	-27	.	.	.	.	.	6	.	.	.	.	.	.	2	.
11	-26	.	.	.	.	.	8	.	.	.	.	.	.	3	.
12	-25	.	.	.	.	.	10	.	.	.	.	.	.	3	.
13	-24	.	.	.	.	1	11	.	.	.	.	.	0	3	.
14	-23	.	.	.	.	2	7	.	.	.	.	.	1	2	.
15	-22	.	.	.	.	1	3	.	.	.	.	.	0	1	.
16	-21	.	.	.	.	1	6	.	.	.	.	.	0	2	.
17	-20	.	.	.	.	1	11	.	.	.	.	.	0	3	.
18	-19	.	1	.	.	1	7	.	.	0	.	.	0	2	.
19	-18	.	.	.	.	4	8	.	.	.	.	.	1	3	.
20	-17	.	3	.	.	2	14	.	.	1	.	.	1	4	.
21	-16	.	2	.	.	5	10	.	.	1	.	.	1	3	.
22	-15	.	3	.	.	2	8	.	.	1	.	.	1	3	.
23	-14	.	1	.	.	3	13	.	.	0	.	.	1	4	.
24	-13	.	.	.	.	2	16	.	.	.	.	.	1	5	.
25	-12	.	6	.	.	6	11	.	.	2	.	.	2	3	.
26	-11	.	8	.	3	4	16	3	.	2	.	1	1	5	1
27	-10	.	4	.	4	7	11	4	.	1	.	1	2	3	1
28	-9	.	11	1	4	2	10	4	.	3	0	1	1	3	1
29	-8	.	11	2	4	12	11	3	.	3	1	1	3	3	1
30	-7	1	8	5	10	9	14	9	0	2	2	3	2	4	3
31	-6	.	7	11	9	12	7	7	.	2	3	2	3	2	2
32	-5	1	7	14	9	4	9	9	0	2	4	2	1	3	3
33	-4	.	17	16	16	5	10	15	.	4	5	4	1	3	5
34	-3	1	24	10	16	24	5	16	0	6	3	4	6	2	5
35	-2	7	52	15	19	28	2	19	2	13	5	5	7	1	6
36	-1	10	40	59	74	72	5	73	3	10	18	19	19	2	22
37	0	54	23	62	44	30	3	43	14	6	19	11	8	1	13

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

Obs	diff	d_cr	d_nrr	d_icf	d_ifl	d_ais	d_hst	d_fert	p_cr	p_nrr	p_icf	p_ifl	p_ais	p_hst	p_fert
38	1	35	24	31	27	32	2	26	9	6	9	7	8	1	8
39	2	25	18	23	21	11	1	21	7	5	7	5	3	0	6
40	3	15	10	17	17	18	1	16	4	3	5	4	5	0	5
41	4	9	14	18	12	11	1	12	2	4	5	3	3	0	4
42	5	11	8	7	11	7	4	11	3	2	2	3	2	1	3
43	6	10	2	5	4	3	1	4	3	1	2	1	1	0	1
44	7	13	7	1	4	10	3	3	3	2	0	1	3	1	1
45	8	6	4	6	4	2	6	4	2	1	2	1	1	2	1
46	9	16	4	.	6	4	5	5	4	1	.	2	1	2	2
47	10	12	6	2	4	2	4	4	3	2	1	1	1	1	1
48	11	14	2	4	4	4	3	2	4	1	1	1	1	1	1
49	12	9	3	2	3	4	3	2	2	1	1	1	1	1	1
50	13	11	5	1	4	3	2	4	3	1	0	1	1	1	1
51	14	9	4	1	2	3	1	1	2	1	0	1	1	0	0
52	15	10	3	4	.	3	1	.	3	1	1	.	1	0	.
53	16	5	2	2	6	4	.	4	1	1	1	2	1	.	1
54	17	7	6	2	2	4	.	1	2	2	1	1	1	.	0
55	18	4	3	.	.	1	.	.	1	1	.	.	0	.	.
56	19	6	7	1	4	2	.	.	2	2	0	1	1	.	.
57	20	9	9	1	5	3	.	1	2	2	0	1	1	.	0
58	21	3	8	2	4	7	.	.	1	2	1	1	2	.	.
59	22	4	3	1	6	3	.	1	1	1	0	2	1	.	0
60	23	3	3	1	4	3	.	1	1	1	0	1	1	.	0
61	24	4	1	.	7	.	.	.	1	0	.	2	.	.	.
62	25	4	1	.	4	1	.	.	1	0	.	1	0	.	.
63	26	2	.	1	4	1	.	.	1	.	0	1	0	.	.
64	27	5	.	.	3	.	.	.	1	.	.	1	.	.	.
65	28	2	.	.	.	.	.	.	1	.	.	.	.	.	.
66	29	4	.	.	1	.	.	.	1	.	.	0	.	.	.
67	30	6	1	.	.	.	.	.	2	0	.	.	.	.	.
68	31	3	.	.	.	.	.	.	1	.	.	.	.	.	.
69	32	2	.	.	1	.	.	.	1	.	.	0	.	.	.
70	33	5	.	.	.	.	.	.	1	.	.	.	.	.	.
71	34	4	.	.	.	.	.	.	1	.	.	.	.	.	.
72	35	4	.	.	.	.	.	.	1	.	.	.	.	.	.
73	36	1	.	.	.	.	.	.	0	.	.	.	.	.	.
74	37	4	.	.	.	.	.	.	1	.	.	.	.	.	.

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

Obs	diff	d_cr	d_nrr	d_icf	d_ifl	d_ais	d_hst	d_fert	p_cr	p_nrr	p_icf	p_ifl	p_ais	p_hst	p_fert
75	38	1	.	.	.	.	.	.	0	.	.	.	.	.	.
76	39	1	.	.	.	.	.	.	0	.	.	.	.	.	.
77	43	1	.	.	.	.	.	.	0	.	.	.	.	.	.

HOL reliability for SS and twostep 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	fert	10369	61.1	81.6	2.4	1.3	-20.4	1.7	0.72
2	2016	fert	15580	61.0	81.4	2.3	1.2	-20.4	1.7	0.71
3	2017	fert	22732	60.7	81.2	2.2	1.2	-20.5	1.6	0.72
4	2018	fert	31648	60.6	81.0	2.2	1.2	-20.4	1.6	0.71
5	2019	fert	34735	60.2	80.7	2.2	1.2	-20.5	1.6	0.72
6	2020	fert	40179	58.9	80.3	2.3	1.2	-21.4	1.6	0.75
7	2021	fert	29178	57.0	79.6	2.4	1.4	-22.5	1.5	0.81
8	2022	fert	28	54.9	77.7	2.4	1.7	-22.7	1.3	0.86

HOL reliability for SS and twostep for genotyped females with phenotype

Obs	diff	d_fert	p_fert
1	-52	1	0
2	-47	1	0
3	-32	4	0
4	-31	1	0
5	-30	27	0
6	-29	98	0
7	-28	291	0
8	-27	697	0
9	-26	1747	1
10	-25	4449	2
11	-24	9675	5
12	-23	17288	9
13	-22	26944	15
14	-21	40946	22
15	-20	45761	25
16	-19	28036	15
17	-18	7468	4
18	-17	901	0
19	-16	90	0
20	-15	9	0
21	-14	5	0
22	-13	1	0
23	-12	1	0
24	-11	1	0
25	-10	2	0
26	-9	2	0
27	-8	3	0

HOL reliability for SS and twostep for nordic AI bulls without offspring

Obs	BYR	name	no	mean_noff	std_noff	mean_ss	mean_e	std_ss	std_e	mean_dif	std_dif	corr_SS
1	2019	fert	22	.	.	59.5	79.9	2.0	0.7	-20.4	1.6	0.63
2	2020	fert	72	.	.	57.4	79.1	2.6	0.8	-21.7	1.9	0.87
3	2021	fert	58	.	.	54.2	77.9	2.8	1.5	-23.6	1.4	0.94
4	2022	fert	61	.	.	50.5	75.4	1.9	1.0	-24.9	1.1	0.89
5	2023	fert	34	.	.	48.7	74.4	1.4	0.7	-25.7	1.0	0.81

HOL reliability for SS and twostep for nordic AI bulls without offspring

Obs	diff	d_fert	p_fert
1	-28	4	2
2	-27	13	5
3	-26	31	13
4	-25	44	18
5	-24	35	14
6	-23	31	13
7	-22	29	12
8	-21	26	11
9	-20	22	9
10	-19	9	4
11	-18	3	1

HOL sum sta for SS and prev SS breeding value for genotyped females without phenotype, by birth year

Obs	BYR	name	no	mean_ss	mean_oss	std_ss	std_oss	mean_dif	std_dif	corr_SS
1	2019	cr0	9273	98.9	99.5	10.7	10.7	-0.6	0.9	1.00
2	2020	cr0	12253	101.3	101.9	9.9	10.0	-0.6	1.0	1.00
3	2021	cr0	7386	105.0	105.8	10.0	10.0	-0.7	1.1	0.99
4	2022	cr0	23365	106.7	107.5	9.9	9.9	-0.8	2.0	0.98
5	2023	cr0	71958	106.4	107.2	9.0	9.0	-0.8	1.7	0.98
6	2024	cr0	14776	106.5	107.3	8.6	8.6	-0.8	1.2	0.99
7	2019	cr1	14867	100.0	100.6	9.0	9.0	-0.6	0.9	0.99
8	2020	cr1	18885	103.3	103.8	9.0	8.9	-0.5	1.0	0.99
9	2021	cr1	31783	105.7	106.2	8.4	8.4	-0.5	1.3	0.99
10	2022	cr1	70614	107.4	108.0	8.3	8.3	-0.6	1.5	0.98
11	2023	cr1	72069	107.3	107.9	8.0	7.9	-0.5	1.3	0.99
12	2024	cr1	14776	107.5	108.1	7.9	7.8	-0.6	1.2	0.99
13	2019	cr2	20459	100.1	100.7	9.0	9.0	-0.5	1.0	0.99
14	2020	cr2	36173	103.7	104.1	8.8	8.8	-0.5	1.1	0.99
15	2021	cr2	62624	105.4	105.9	8.2	8.2	-0.4	1.4	0.98
16	2022	cr2	70795	107.1	107.6	8.2	8.2	-0.5	1.5	0.98
17	2023	cr2	72069	107.0	107.5	7.9	7.9	-0.5	1.3	0.99
18	2024	cr2	14776	107.3	107.8	7.9	7.8	-0.5	1.2	0.99
19	2019	cr3	35884	100.2	100.7	9.0	8.9	-0.5	1.1	0.99
20	2020	cr3	58720	104.0	104.5	8.7	8.7	-0.5	1.1	0.99
21	2021	cr3	62925	105.4	105.9	8.1	8.1	-0.4	1.4	0.98
22	2022	cr3	70795	107.1	107.6	8.2	8.1	-0.5	1.5	0.98
23	2023	cr3	72069	107.1	107.5	7.9	7.9	-0.5	1.3	0.99
24	2024	cr3	14776	107.4	107.8	7.9	7.8	-0.5	1.2	0.99
25	2019	cr	7910	100.0	100.6	9.1	9.0	-0.5	1.0	0.99
26	2020	cr	10867	103.3	103.8	8.9	8.9	-0.5	1.1	0.99
27	2021	cr	6661	105.0	105.5	8.3	8.3	-0.5	1.4	0.99
28	2022	cr	23349	107.3	107.9	8.3	8.3	-0.5	1.4	0.98
29	2023	cr	71958	107.2	107.7	8.0	7.9	-0.5	1.3	0.99
30	2024	cr	14776	107.5	108.0	7.9	7.9	-0.5	1.2	0.99
31	2019	nrr0	10591	98.8	99.1	10.1	10.2	-0.3	1.1	0.99
32	2020	nrr0	13704	100.4	100.8	9.6	9.6	-0.4	1.2	0.99
33	2021	nrr0	9110	103.5	103.9	9.7	9.7	-0.4	1.3	0.99
34	2022	nrr0	12874	103.4	103.9	9.7	9.8	-0.4	1.8	0.98
35	2023	nrr0	65467	102.8	103.5	9.1	8.9	-0.7	2.2	0.97
36	2024	nrr0	14776	102.8	103.4	8.7	8.5	-0.5	1.8	0.98
37	2019	nrr1	16051	99.9	100.3	8.6	8.6	-0.4	1.0	0.99

HOL sum sta for SS and prev SS breeding value for genotyped females without phenotype, by birth year

Obs	BYR	name	no	mean_ss	mean_oss	std_ss	std_oss	mean_dif	std_dif	corr_SS
38	2020	nrr1	20205	101.9	102.3	8.6	8.5	-0.3	1.1	0.99
39	2021	nrr1	25165	103.6	103.9	8.3	8.2	-0.3	1.6	0.98
40	2022	nrr1	66731	105.0	105.2	8.3	8.2	-0.2	1.9	0.97
41	2023	nrr1	72069	104.8	105.0	8.0	7.8	-0.2	1.6	0.98
42	2024	nrr1	14776	105.1	105.3	7.9	7.7	-0.2	1.6	0.98
43	2019	nrr2	21337	99.6	100.0	8.9	8.9	-0.4	1.2	0.99
44	2020	nrr2	30723	101.9	102.5	8.9	8.8	-0.6	1.6	0.98
45	2021	nrr2	59864	103.3	103.5	8.2	7.9	-0.2	2.3	0.96
46	2022	nrr2	70795	104.6	104.8	8.2	8.0	-0.2	2.0	0.97
47	2023	nrr2	72069	104.4	104.7	7.9	7.8	-0.3	1.8	0.97
48	2024	nrr2	14776	105.0	105.2	8.0	7.8	-0.3	1.7	0.98
49	2019	nrr3	32497	99.5	100.0	9.5	9.4	-0.5	1.6	0.99
50	2020	nrr3	57068	102.1	102.5	9.1	9.0	-0.4	1.7	0.98
51	2021	nrr3	62925	103.2	103.6	8.5	8.3	-0.3	2.0	0.97
52	2022	nrr3	70795	104.8	105.0	8.6	8.4	-0.2	1.9	0.97
53	2023	nrr3	72069	104.2	104.4	8.4	8.1	-0.2	1.7	0.98
54	2024	nrr3	14776	104.8	105.0	8.2	8.1	-0.2	1.6	0.98
55	2019	nrr	8338	99.6	100.1	8.9	8.8	-0.5	1.1	0.99
56	2020	nrr	11240	101.8	102.2	8.7	8.5	-0.5	1.3	0.99
57	2021	nrr	7155	103.1	103.4	8.0	7.9	-0.3	1.7	0.98
58	2022	nrr	12678	104.9	105.0	8.1	8.0	-0.2	1.7	0.98
59	2023	nrr	65467	104.4	104.7	7.8	7.6	-0.2	1.6	0.98
60	2024	nrr	14776	105.0	105.2	7.8	7.6	-0.2	1.5	0.98
61	2019	icf1	15710	100.6	100.7	8.1	8.1	-0.1	0.7	1.00
62	2020	icf1	19806	101.9	102.1	8.0	7.9	-0.2	0.8	1.00
63	2021	icf1	24920	101.9	102.2	7.5	7.4	-0.2	1.0	0.99
64	2022	icf1	67842	102.0	102.2	7.5	7.5	-0.2	1.3	0.99
65	2023	icf1	72069	102.2	102.5	7.3	7.3	-0.3	1.1	0.99
66	2024	icf1	14776	101.7	101.9	7.1	7.1	-0.2	1.0	0.99
67	2019	icf2	20995	100.5	100.7	8.7	8.6	-0.2	0.8	1.00
68	2020	icf2	30571	102.1	102.2	8.4	8.3	-0.2	1.0	0.99
69	2021	icf2	60641	102.2	102.3	7.9	7.8	-0.1	1.2	0.99
70	2022	icf2	70795	102.4	102.5	7.8	7.8	-0.1	1.2	0.99
71	2023	icf2	72069	102.5	102.7	7.6	7.5	-0.2	1.0	0.99
72	2024	icf2	14776	102.1	102.2	7.4	7.4	-0.1	1.0	0.99
73	2019	icf3	32313	100.4	100.7	9.1	8.9	-0.2	1.0	0.99
74	2020	icf3	57518	102.5	102.6	8.6	8.5	-0.1	1.1	0.99

HOL sum sta for SS and prev SS breeding value for genotyped females without phenotype, by birth year

Obs	BYR	name	no	mean_ss	mean_oss	std_ss	std_oss	mean_dif	std_dif	corr_SS
75	2021	icf3	62925	102.4	102.5	8.2	8.1	-0.1	1.2	0.99
76	2022	icf3	70795	102.3	102.3	8.0	7.9	0.0	1.2	0.99
77	2023	icf3	72069	102.6	102.7	7.8	7.7	-0.1	1.1	0.99
78	2024	icf3	14776	102.3	102.3	7.7	7.5	0.0	1.0	0.99
79	2019	icf	14371	100.7	100.9	8.6	8.5	-0.2	0.8	1.00
80	2020	icf	18630	102.2	102.3	8.3	8.2	-0.1	0.9	0.99
81	2021	icf	24793	102.1	102.2	7.9	7.8	-0.1	1.1	0.99
82	2022	icf	67842	102.3	102.4	7.7	7.7	-0.1	1.1	0.99
83	2023	icf	72069	102.5	102.7	7.6	7.5	-0.2	1.0	0.99
84	2024	icf	14776	102.1	102.2	7.4	7.3	-0.1	1.0	0.99
85	2019	ifl0	11375	99.1	99.4	9.7	9.7	-0.3	1.2	0.99
86	2020	ifl0	14580	101.0	101.4	9.1	9.1	-0.4	1.2	0.99
87	2021	ifl0	10120	103.8	104.3	9.2	9.2	-0.4	1.3	0.99
88	2022	ifl0	13688	104.1	104.6	9.1	9.1	-0.5	1.7	0.98
89	2023	ifl0	65463	103.7	104.5	8.5	8.5	-0.8	2.0	0.97
90	2024	ifl0	14776	103.7	104.4	8.2	8.2	-0.7	1.6	0.98
91	2019	ifl1	15849	100.3	100.7	9.4	9.3	-0.5	0.9	1.00
92	2020	ifl1	19966	103.1	103.6	9.2	9.1	-0.5	1.0	0.99
93	2021	ifl1	24796	104.7	105.0	8.6	8.4	-0.3	1.5	0.99
94	2022	ifl1	66669	106.3	106.5	8.4	8.2	-0.2	1.6	0.98
95	2023	ifl1	72069	106.3	106.7	8.2	8.0	-0.4	1.4	0.98
96	2024	ifl1	14776	106.4	106.6	8.0	7.9	-0.2	1.3	0.99
97	2019	ifl2	21112	100.3	100.8	9.8	9.8	-0.5	1.1	0.99
98	2020	ifl2	30396	103.3	103.9	9.6	9.5	-0.6	1.3	0.99
99	2021	ifl2	59818	104.8	105.0	8.8	8.7	-0.2	1.9	0.98
100	2022	ifl2	70795	106.4	106.7	8.7	8.5	-0.3	1.7	0.98
101	2023	ifl2	72069	106.3	106.7	8.5	8.3	-0.4	1.5	0.98
102	2024	ifl2	14776	106.6	106.9	8.4	8.3	-0.3	1.5	0.98
103	2019	ifl3	32228	100.2	100.8	10.1	9.9	-0.6	1.3	0.99
104	2020	ifl3	57039	104.0	104.4	9.6	9.5	-0.5	1.4	0.99
105	2021	ifl3	62925	104.9	105.1	8.9	8.7	-0.2	1.8	0.98
106	2022	ifl3	70795	106.6	106.8	8.9	8.7	-0.2	1.7	0.98
107	2023	ifl3	72069	106.5	106.8	8.7	8.4	-0.3	1.5	0.98
108	2024	ifl3	14776	106.9	107.2	8.6	8.4	-0.2	1.5	0.99
109	2019	ifl	8506	100.2	100.8	9.5	9.5	-0.5	1.0	0.99
110	2020	ifl	11391	103.2	103.7	9.3	9.2	-0.5	1.1	0.99
111	2021	ifl	7663	104.3	104.5	8.6	8.5	-0.2	1.6	0.98

HOL sum sta for SS and prev SS breeding value for genotyped females without phenotype, by birth year

Obs	BYR	name	no	mean_ss	mean_oss	std_ss	std_oss	mean_dif	std_dif	corr_SS
112	2022	ifl	13484	106.2	106.5	8.5	8.3	-0.2	1.5	0.98
113	2023	ifl	65463	106.3	106.6	8.3	8.0	-0.4	1.4	0.99
114	2024	ifl	14776	106.6	106.9	8.2	8.0	-0.3	1.3	0.99
115	2019	ais0	11001	99.6	99.8	10.0	10.0	-0.2	1.1	0.99
116	2020	ais0	14161	100.9	101.2	9.4	9.4	-0.3	1.1	0.99
117	2021	ais0	9575	103.3	103.5	9.3	9.3	-0.2	1.2	0.99
118	2022	ais0	12950	103.0	103.4	9.5	9.5	-0.4	1.7	0.98
119	2023	ais0	65467	102.4	103.1	8.8	8.8	-0.6	1.9	0.98
120	2024	ais0	14776	102.3	102.7	8.6	8.6	-0.4	1.5	0.98
121	2019	ais1	16156	100.6	100.8	9.3	9.3	-0.3	0.9	0.99
122	2020	ais1	20326	102.8	103.1	9.2	9.1	-0.3	1.0	0.99
123	2021	ais1	25648	103.7	103.8	8.6	8.5	-0.2	1.3	0.99
124	2022	ais1	68092	104.7	104.9	8.4	8.3	-0.2	1.5	0.98
125	2023	ais1	72069	104.4	104.9	8.2	8.1	-0.4	1.4	0.99
126	2024	ais1	14776	104.3	104.5	8.0	8.0	-0.2	1.3	0.99
127	2019	ais2	21424	100.3	100.6	9.9	9.9	-0.3	1.1	0.99
128	2020	ais2	31235	102.6	103.0	9.6	9.5	-0.4	1.3	0.99
129	2021	ais2	60766	103.8	103.9	8.9	8.8	-0.2	1.6	0.98
130	2022	ais2	70795	104.9	105.2	8.9	8.8	-0.2	1.5	0.99
131	2023	ais2	72069	104.4	104.8	8.6	8.5	-0.4	1.5	0.99
132	2024	ais2	14776	104.6	104.8	8.5	8.5	-0.3	1.3	0.99
133	2019	ais3	32861	100.1	100.4	10.0	9.8	-0.3	1.4	0.99
134	2020	ais3	57598	102.9	103.3	9.4	9.1	-0.4	1.4	0.99
135	2021	ais3	62925	103.5	103.7	8.7	8.6	-0.2	1.6	0.98
136	2022	ais3	70795	104.4	104.7	8.9	8.7	-0.3	1.6	0.98
137	2023	ais3	72069	103.9	104.4	8.7	8.5	-0.5	1.5	0.98
138	2024	ais3	14776	104.2	104.6	8.5	8.4	-0.3	1.4	0.99
139	2019	ais	8421	100.3	100.6	9.5	9.4	-0.3	1.0	0.99
140	2020	ais	11327	102.6	102.9	9.1	9.0	-0.3	1.1	0.99
141	2021	ais	7401	103.4	103.6	8.5	8.4	-0.2	1.3	0.99
142	2022	ais	12801	104.7	105.0	8.5	8.4	-0.3	1.4	0.99
143	2023	ais	65467	104.1	104.6	8.2	8.1	-0.5	1.4	0.99
144	2024	ais	14776	104.3	104.6	8.1	8.0	-0.3	1.2	0.99
145	2019	hst0	42669	101.3	101.2	9.1	9.2	0.1	1.3	0.99
146	2020	hst0	50383	100.9	100.9	9.0	9.0	0.1	1.4	0.99
147	2021	hst0	53232	100.6	100.8	8.7	8.9	-0.3	1.5	0.99
148	2022	hst0	60556	99.4	100.0	8.6	8.7	-0.6	2.3	0.96

HOL sum sta for SS and prev SS breeding value for genotyped females without phenotype, by birth year

Obs	BYR	name	no	mean_ss	mean_oss	std_ss	std_oss	mean_dif	std_dif	corr_SS
149	2023	hst0	71612	99.8	100.1	8.7	8.7	-0.3	2.2	0.97
150	2024	hst0	14776	99.5	100.1	8.3	8.4	-0.5	1.7	0.98
151	2019	hst1	43451	100.8	101.0	8.4	8.5	-0.2	1.2	0.99
152	2020	hst1	51557	102.1	102.2	8.4	8.6	-0.1	1.4	0.99
153	2021	hst1	55963	101.8	101.8	8.0	8.2	0.0	1.9	0.97
154	2022	hst1	70577	102.1	102.3	8.0	8.1	-0.2	1.8	0.98
155	2023	hst1	72069	102.0	102.0	7.9	8.0	0.0	1.6	0.98
156	2024	hst1	14776	102.0	102.0	7.8	7.8	0.0	1.6	0.98
157	2019	hst2	44619	100.4	100.6	9.4	9.4	-0.2	1.3	0.99
158	2020	hst2	54254	102.4	102.5	9.2	9.1	-0.1	1.8	0.98
159	2021	hst2	62722	101.7	101.7	8.6	8.5	0.0	1.8	0.98
160	2022	hst2	70795	102.2	102.3	8.5	8.4	-0.2	1.7	0.98
161	2023	hst2	72069	102.2	102.2	8.3	8.2	-0.1	1.6	0.98
162	2024	hst2	14776	102.2	102.2	8.1	8.1	-0.1	1.5	0.98
163	2019	hst3	46887	100.5	100.7	8.7	8.5	-0.2	1.8	0.98
164	2020	hst3	58866	102.4	102.3	8.5	8.3	0.1	1.8	0.98
165	2021	hst3	62925	101.7	101.8	8.1	7.9	-0.1	1.6	0.98
166	2022	hst3	70795	102.1	102.3	7.9	7.7	-0.2	1.6	0.98
167	2023	hst3	72069	102.0	102.1	7.9	7.7	-0.1	1.5	0.98
168	2024	hst3	14776	102.2	102.2	7.6	7.5	0.0	1.4	0.98
169	2019	hst	41967	100.6	100.8	8.7	8.7	-0.2	1.3	0.99
170	2020	hst	49706	102.4	102.5	8.6	8.5	0.0	1.5	0.98
171	2021	hst	52668	101.8	101.8	8.0	8.0	-0.1	1.6	0.98
172	2022	hst	60528	102.2	102.4	7.9	7.9	-0.2	1.6	0.98
173	2023	hst	71612	102.1	102.2	7.9	7.8	-0.1	1.5	0.98
174	2024	hst	14776	102.2	102.3	7.7	7.6	0.0	1.4	0.98
175	2019	fert	14371	100.2	100.7	9.7	9.6	-0.5	1.0	1.00
176	2020	fert	18630	103.2	103.6	9.4	9.3	-0.5	1.1	0.99
177	2021	fert	24793	104.5	104.8	8.6	8.5	-0.3	1.4	0.99
178	2022	fert	67842	106.1	106.4	8.5	8.4	-0.3	1.4	0.99
179	2023	fert	72069	106.0	106.4	8.3	8.1	-0.5	1.3	0.99
180	2024	fert	14776	106.1	106.4	8.2	8.1	-0.3	1.2	0.99

HOL sum sta for SS and prev SS breeding value for genotyped females without phenotype, by birth year

Obs	diff	d_cr	d_nrr	d_icf	d_ifl	d_ais	d_hst	d_fert
1	-25	.	.	.	.	.	1	.
2	-24	.	.	1	.	.	.	.
3	-17	.	.	.	.	.	.	1
4	-15	.	.	.	.	.	1	.
5	-14	.	.	.	.	.	.	2
6	-13	.	.	.	1	.	3	.
7	-12	.	.	.	.	.	.	1
8	-11	.	.	.	.	1	1	.
9	-10	1	1	1	.	.	1	.
10	-9	.	.	.	.	.	1	.
11	-8	.	.	2	.	.	4	1
12	-7	.	1	2	1	.	10	2
13	-6	3	39	2	6	1	87	5
14	-5	87	293	2	115	90	708	82
15	-4	1021	1664	83	1005	997	3106	1309
16	-3	6218	6129	1885	5144	5083	10672	8507
17	-2	21320	16090	16599	16779	16034	32737	30043
18	-1	40272	28413	57511	32433	32840	66608	58675
19	0	38921	30866	81488	35084	36492	79164	62684
20	1	19761	21485	44626	20975	20805	58671	35945
21	2	6286	10448	9412	7218	6382	28134	11600
22	3	1399	3436	821	1948	1206	9025	2972
23	4	216	695	33	480	224	2007	580
24	5	13	81	3	81	35	281	59
25	6	.	11	.	11	1	27	5
26	7	2	.	3	2	1	2	2
27	8	.	1	1	.	.	2	1
28	9	.	.	1	.	.	.	1
29	10	.	1	1	.	.	1	.
30	11	.	.	1	.	.	1	.
31	12	1	.	2	.	.	1	1
32	13	.	.	.	.	1	1	.
33	14	.	.	.	.	.	.	1
34	19	.	.	.	.	.	.	1
35	20	.	.	1	.	.	.	.
36	21	.	.	.	.	.	.	1

HOL sum sta for SS and prev SS breeding value for genotyped females without phenotype, by birth year

Obs	diff	p_cr	p_nrr	p_icf	p_ifl	p_ais	p_hst	p_fert
1	-25	.	.	.	.	.	0	.
2	-24	.	.	0	.	.	.	.
3	-17	.	.	.	.	.	.	0
4	-15	.	.	.	.	.	0	.
5	-14	.	.	.	.	.	.	0
6	-13	.	.	.	0	.	0	.
7	-12	.	.	.	.	.	.	0
8	-11	.	.	.	.	0	0	.
9	-10	0	0	0	.	.	0	.
10	-9	.	.	.	.	.	0	.
11	-8	.	.	0	.	.	0	0
12	-7	.	0	0	0	.	0	0
13	-6	0	0	0	0	0	0	0
14	-5	0	0	0	0	0	0	0
15	-4	1	1	0	1	1	1	1
16	-3	5	5	1	4	4	4	4
17	-2	16	13	8	14	13	11	14
18	-1	30	24	27	27	27	23	28
19	0	29	26	38	29	30	27	30
20	1	15	18	21	17	17	20	17
21	2	5	9	4	6	5	10	5
22	3	1	3	0	2	1	3	1
23	4	0	1	0	0	0	1	0
24	5	0	0	0	0	0	0	0
25	6	.	0	.	0	0	0	0
26	7	0	.	0	0	0	0	0
27	8	.	0	0	.	.	0	0
28	9	.	.	0	.	.	.	0
29	10	.	0	0	.	.	0	.
30	11	.	.	0	.	.	0	.
31	12	0	.	0	.	.	0	0
32	13	.	.	.	.	0	0	.
33	14	.	.	.	.	.	.	0
34	19	.	.	.	.	.	.	0
35	20	.	.	0	.	.	.	.
36	21	.	.	.	.	.	.	0

HOL sum sta for SS and previous breeding value for genotyped females with phenotype, by birth year

Obs	BYR	name	no	mean_ss	mean_oss	std_ss	std_oss	mean_dif	std_dif	corr_SS
1	2015	cr0	11807	93.0	93.4	10.3	10.3	-0.4	1.1	0.99
2	2016	cr0	17752	94.8	95.3	10.2	10.3	-0.4	1.1	0.99
3	2017	cr0	25901	96.9	97.4	11.0	11.0	-0.5	1.0	1.00
4	2018	cr0	36099	96.5	97.1	10.4	10.4	-0.5	1.0	0.99
5	2019	cr0	39911	99.9	100.5	10.6	10.7	-0.6	0.9	1.00
6	2020	cr0	46756	102.2	102.9	9.9	10.0	-0.6	1.0	1.00
7	2021	cr0	55301	105.5	106.3	10.1	10.1	-0.7	1.0	0.99
8	2022	cr0	31708	107.0	107.8	9.9	9.8	-0.9	1.5	0.99
9	2023	cr0	1	.	.	.	.	.	.	.
10	2015	cr1	10093	93.3	93.8	9.2	9.2	-0.5	1.1	0.99
11	2016	cr1	15320	95.4	95.9	9.1	9.1	-0.5	1.1	0.99
12	2017	cr1	22411	97.7	98.2	9.3	9.3	-0.5	1.1	0.99
13	2018	cr1	31154	99.1	99.6	8.9	8.8	-0.6	1.0	0.99
14	2019	cr1	34301	101.1	101.7	9.0	9.0	-0.6	1.0	0.99
15	2020	cr1	39948	104.3	104.8	8.8	8.8	-0.5	1.0	0.99
16	2021	cr1	20877	106.0	106.4	8.4	8.4	-0.5	1.2	0.99
17	2022	cr1	1	.	.	.	.	.	.	.
18	2015	cr2	8528	93.6	94.2	9.3	9.3	-0.5	1.1	0.99
19	2016	cr2	13021	95.8	96.3	9.3	9.2	-0.5	1.1	0.99
20	2017	cr2	18940	98.2	98.7	9.3	9.3	-0.5	1.1	0.99
21	2018	cr2	26201	99.6	100.1	9.1	9.1	-0.5	1.1	0.99
22	2019	cr2	28408	101.5	102.0	9.0	9.0	-0.5	1.0	0.99
23	2020	cr2	15042	104.8	105.3	8.8	8.8	-0.5	1.1	0.99
24	2021	cr2	6	.	.	.	.	.	.	1.00
25	2015	cr3	6208	94.4	95.0	9.3	9.2	-0.6	1.1	0.99
26	2016	cr3	9573	96.4	97.0	9.1	9.1	-0.6	1.1	0.99
27	2017	cr3	13893	98.8	99.4	9.2	9.1	-0.6	1.1	0.99
28	2018	cr3	18835	100.2	100.8	9.0	9.0	-0.6	1.1	0.99
29	2019	cr3	8393	102.9	103.4	8.7	8.7	-0.5	1.2	0.99
30	2020	cr3	19	.	.	.	.	.	.	0.99
31	2015	cr	12280	92.9	93.5	9.3	9.3	-0.6	1.2	0.99
32	2016	cr	18447	95.1	95.6	9.3	9.3	-0.6	1.1	0.99
33	2017	cr	26785	97.6	98.1	9.3	9.3	-0.6	1.1	0.99
34	2018	cr	37250	99.0	99.6	9.1	9.0	-0.6	1.1	0.99
35	2019	cr	41259	101.0	101.6	9.0	9.0	-0.5	1.0	0.99
36	2020	cr	47995	104.3	104.8	8.8	8.8	-0.5	1.1	0.99
37	2021	cr	55804	105.7	106.2	8.2	8.2	-0.5	1.4	0.99

HOL sum sta for SS and previous breeding value for genotyped females with phenotype, by birth year

Obs	BYR	name	no	mean_ss	mean_oss	std_ss	std_oss	mean_dif	std_dif	corr_SS
38	2022	cr	31709	107.2	107.8	8.2	8.1	-0.6	1.5	0.98
39	2023	cr	1	.	.	.	.	.	.	.
40	2015	nrr0	11466	96.8	96.9	10.1	10.1	-0.2	1.3	0.99
41	2016	nrr0	17129	97.6	97.8	9.8	9.8	-0.2	1.2	0.99
42	2017	nrr0	24980	98.8	99.1	10.5	10.5	-0.3	1.2	0.99
43	2018	nrr0	34958	97.3	97.6	10.1	10.1	-0.3	1.2	0.99
44	2019	nrr0	38594	99.5	99.9	10.0	10.1	-0.3	1.1	0.99
45	2020	nrr0	45307	101.0	101.4	9.7	9.7	-0.4	1.2	0.99
46	2021	nrr0	53772	103.6	104.0	9.8	9.8	-0.4	1.2	0.99
47	2022	nrr0	46205	103.4	103.8	9.8	9.8	-0.4	1.6	0.99
48	2023	nrr0	90	.	.	.	.	.	.	0.97
49	2015	nrr1	9750	96.0	96.3	9.0	9.0	-0.3	1.1	0.99
50	2016	nrr1	14831	97.3	97.6	8.6	8.6	-0.3	1.1	0.99
51	2017	nrr1	21661	98.8	99.2	8.8	8.7	-0.3	1.1	0.99
52	2018	nrr1	30117	98.9	99.2	8.4	8.3	-0.4	1.1	0.99
53	2019	nrr1	33121	100.6	101.0	8.5	8.5	-0.4	1.0	0.99
54	2020	nrr1	38741	102.6	102.9	8.6	8.5	-0.3	1.1	0.99
55	2021	nrr1	29562	103.7	104.0	8.2	8.2	-0.3	1.5	0.98
56	2022	nrr1	140	.	.	.	.	.	.	0.97
57	2015	nrr2	8210	95.0	95.2	9.5	9.4	-0.2	1.2	0.99
58	2016	nrr2	12600	96.5	96.7	9.1	9.0	-0.2	1.1	0.99
59	2017	nrr2	18293	98.6	98.9	8.9	8.9	-0.2	1.2	0.99
60	2018	nrr2	25348	98.5	98.8	9.0	9.0	-0.3	1.2	0.99
61	2019	nrr2	27726	100.4	100.8	9.0	9.0	-0.4	1.2	0.99
62	2020	nrr2	21680	102.7	103.3	8.9	8.8	-0.6	1.5	0.99
63	2021	nrr2	247	.	.	.	.	.	.	0.96
64	2015	nrr3	5974	95.4	95.8	10.1	9.9	-0.5	1.3	0.99
65	2016	nrr3	9198	97.2	97.6	9.8	9.7	-0.5	1.2	0.99
66	2017	nrr3	13389	98.7	99.0	9.4	9.4	-0.3	1.3	0.99
67	2018	nrr3	18562	98.7	99.1	9.7	9.7	-0.4	1.3	0.99
68	2019	nrr3	12602	101.0	101.5	9.7	9.6	-0.6	1.5	0.99
69	2020	nrr3	240	.	.	.	.	.	.	0.98
70	2015	nrr	12155	95.0	95.3	9.2	9.1	-0.4	1.1	0.99
71	2016	nrr	18232	96.6	96.9	8.9	8.9	-0.3	1.1	0.99
72	2017	nrr	26489	98.3	98.6	8.7	8.7	-0.3	1.1	0.99
73	2018	nrr	36921	98.4	98.7	8.7	8.7	-0.4	1.1	0.99
74	2019	nrr	40841	100.2	100.7	8.7	8.7	-0.5	1.2	0.99

HOL sum sta for SS and previous breeding value for genotyped females with phenotype, by birth year

Obs	BYR	name	no	mean_ss	mean_oss	std_ss	std_oss	mean_dif	std_dif	corr_SS
75	2020	nrr	47638	102.3	102.8	8.6	8.5	-0.4	1.3	0.99
76	2021	nrr	55240	103.5	103.8	8.0	7.8	-0.3	1.8	0.98
77	2022	nrr	46228	104.8	105.0	8.1	7.9	-0.2	1.8	0.97
78	2023	nrr	90	.	.	.	.	.	.	0.98
79	2015	icf1	9842	98.0	98.2	8.3	8.3	-0.2	0.9	0.99
80	2016	icf1	14952	98.8	99.0	8.2	8.2	-0.2	0.8	0.99
81	2017	icf1	21845	99.6	99.8	8.1	8.1	-0.2	0.8	1.00
82	2018	icf1	30412	102.0	102.1	8.2	8.2	-0.2	0.8	1.00
83	2019	icf1	33462	100.9	101.0	8.0	8.0	-0.1	0.8	1.00
84	2020	icf1	39135	102.2	102.4	7.9	7.9	-0.2	0.8	0.99
85	2021	icf1	29004	102.4	102.6	7.5	7.4	-0.2	1.0	0.99
86	2022	icf1	28	.	.	.	.	.	.	0.97
87	2015	icf2	8302	97.7	97.9	8.7	8.7	-0.2	0.9	0.99
88	2016	icf2	12733	98.7	99.0	8.7	8.7	-0.2	0.8	1.00
89	2017	icf2	18488	99.5	99.7	8.6	8.6	-0.2	0.8	1.00
90	2018	icf2	25611	101.9	102.1	8.6	8.6	-0.2	0.8	1.00
91	2019	icf2	28064	101.2	101.4	8.5	8.5	-0.2	0.8	1.00
92	2020	icf2	21213	103.0	103.2	8.3	8.2	-0.1	1.0	0.99
93	2021	icf2	76	.	.	.	.	.	.	0.99
94	2015	icf3	6056	98.1	98.4	8.9	8.9	-0.3	0.9	0.99
95	2016	icf3	9335	99.3	99.6	9.0	9.0	-0.3	0.9	1.00
96	2017	icf3	13596	100.2	100.4	8.9	8.9	-0.2	0.9	1.00
97	2018	icf3	18875	102.6	102.8	8.9	8.9	-0.2	0.9	0.99
98	2019	icf3	12460	102.3	102.5	8.5	8.4	-0.2	1.0	0.99
99	2020	icf3	103	.	.	.	.	.	.	0.99
100	2015	icf	10388	97.5	97.8	8.7	8.7	-0.3	0.9	0.99
101	2016	icf	15592	98.6	98.8	8.7	8.7	-0.2	0.8	1.00
102	2017	icf	22744	99.5	99.7	8.7	8.6	-0.2	0.8	1.00
103	2018	icf	31665	101.9	102.1	8.6	8.6	-0.2	0.8	1.00
104	2019	icf	34769	101.0	101.2	8.5	8.5	-0.2	0.9	0.99
105	2020	icf	40063	102.6	102.7	8.3	8.2	-0.1	0.9	0.99
106	2021	icf	29018	102.6	102.7	7.8	7.7	-0.2	1.0	0.99
107	2022	icf	28	.	.	.	.	.	.	0.98
108	2015	ifl0	11146	96.8	96.9	9.4	9.4	-0.1	1.3	0.99
109	2016	ifl0	16649	97.6	97.8	9.4	9.4	-0.1	1.3	0.99
110	2017	ifl0	24386	98.9	99.2	10.2	10.2	-0.3	1.2	0.99
111	2018	ifl0	34110	98.3	98.6	9.8	9.8	-0.3	1.3	0.99

HOL sum sta for SS and previous breeding value for genotyped females with phenotype, by birth year

Obs	BYR	name	no	mean_ss	mean_oss	std_ss	std_oss	mean_dif	std_dif	corr_SS
112	2019	ifl0	37811	100.2	100.5	9.7	9.8	-0.3	1.2	0.99
113	2020	ifl0	44432	101.8	102.2	9.2	9.2	-0.4	1.2	0.99
114	2021	ifl0	52759	104.3	104.7	9.3	9.3	-0.4	1.3	0.99
115	2022	ifl0	45410	104.4	104.9	9.2	9.2	-0.5	1.7	0.98
116	2023	ifl0	87	.	.	.	.	.	.	0.97
117	2015	ifl1	9808	94.7	95.0	9.2	9.2	-0.4	1.1	0.99
118	2016	ifl1	14902	96.5	96.9	9.3	9.2	-0.4	1.1	0.99
119	2017	ifl1	21769	98.4	98.8	9.7	9.6	-0.4	1.1	0.99
120	2018	ifl1	30319	100.5	100.9	9.2	9.2	-0.4	1.0	0.99
121	2019	ifl1	33328	101.4	101.9	9.3	9.3	-0.4	1.0	0.99
122	2020	ifl1	38977	104.1	104.6	9.1	9.1	-0.5	1.1	0.99
123	2021	ifl1	29856	105.3	105.7	8.6	8.4	-0.3	1.5	0.99
124	2022	ifl1	149	.	.	.	.	.	.	0.97
125	2015	ifl2	8271	94.2	94.5	9.8	9.7	-0.3	1.2	0.99
126	2016	ifl2	12683	96.4	96.7	9.8	9.8	-0.3	1.1	0.99
127	2017	ifl2	18409	98.5	98.9	10.2	10.2	-0.3	1.1	0.99
128	2018	ifl2	25492	100.6	101.0	9.9	9.8	-0.3	1.1	0.99
129	2019	ifl2	27947	101.7	102.2	9.8	9.8	-0.5	1.2	0.99
130	2020	ifl2	21950	104.9	105.5	9.4	9.3	-0.6	1.3	0.99
131	2021	ifl2	253	108.4	108.3	8.5	8.3	0.1	1.7	0.98
132	2015	ifl3	6018	94.6	95.0	9.9	9.8	-0.4	1.2	0.99
133	2016	ifl3	9295	96.7	97.2	10.0	9.9	-0.4	1.1	0.99
134	2017	ifl3	13535	99.1	99.5	10.4	10.3	-0.4	1.2	0.99
135	2018	ifl3	18779	101.2	101.6	10.1	10.0	-0.4	1.2	0.99
136	2019	ifl3	12814	103.2	103.7	9.7	9.5	-0.5	1.4	0.99
137	2020	ifl3	246	.	.	.	.	.	.	0.99
138	2015	ifl	12109	93.7	94.0	9.6	9.5	-0.4	1.1	0.99
139	2016	ifl	18143	95.8	96.1	9.7	9.6	-0.4	1.1	0.99
140	2017	ifl	26395	98.0	98.4	10.0	9.9	-0.4	1.1	0.99
141	2018	ifl	36730	100.1	100.5	9.6	9.6	-0.4	1.1	0.99
142	2019	ifl	40673	101.3	101.8	9.6	9.5	-0.5	1.1	0.99
143	2020	ifl	47469	104.2	104.6	9.2	9.1	-0.5	1.2	0.99
144	2021	ifl	54512	105.0	105.3	8.5	8.4	-0.2	1.6	0.98
145	2022	ifl	45434	106.4	106.6	8.5	8.3	-0.2	1.6	0.98
146	2023	ifl	87	.	.	.	.	.	.	0.99
147	2015	ais0	11327	97.6	97.8	9.8	9.8	-0.2	1.2	0.99
148	2016	ais0	16922	98.5	98.7	9.7	9.8	-0.2	1.2	0.99

HOL sum sta for SS and previous breeding value for genotyped females with phenotype, by birth year

Obs	BYR	name	no	mean_ss	mean_oss	std_ss	std_oss	mean_dif	std_dif	corr_SS
149	2017	ais0	24665	99.5	99.7	10.3	10.3	-0.2	1.2	0.99
150	2018	ais0	34577	98.4	98.7	9.9	9.9	-0.3	1.2	0.99
151	2019	ais0	38185	100.3	100.6	9.9	9.9	-0.3	1.1	0.99
152	2020	ais0	44850	101.4	101.7	9.5	9.5	-0.3	1.1	0.99
153	2021	ais0	53307	103.3	103.5	9.5	9.5	-0.2	1.2	0.99
154	2022	ais0	46129	103.0	103.3	9.5	9.5	-0.3	1.6	0.99
155	2023	ais0	90	.	.	.	.	.	.	0.97
156	2015	ais1	9707	96.2	96.5	9.2	9.2	-0.3	1.1	0.99
157	2016	ais1	14779	97.8	98.0	9.2	9.2	-0.2	1.1	0.99
158	2017	ais1	21589	99.6	99.8	9.5	9.4	-0.3	1.1	0.99
159	2018	ais1	30003	100.4	100.8	9.0	9.0	-0.3	1.0	0.99
160	2019	ais1	33019	101.3	101.6	9.3	9.2	-0.3	1.0	0.99
161	2020	ais1	38616	103.4	103.7	9.1	9.1	-0.3	1.0	0.99
162	2021	ais1	28076	104.1	104.2	8.6	8.5	-0.2	1.3	0.99
163	2022	ais1	25	.	.	.	.	.	.	0.98
164	2015	ais2	8172	95.8	96.0	10.1	10.0	-0.2	1.2	0.99
165	2016	ais2	12553	97.8	97.9	10.0	10.0	-0.1	1.1	0.99
166	2017	ais2	18228	99.6	99.8	10.0	10.0	-0.2	1.1	0.99
167	2018	ais2	25258	100.2	100.4	9.9	9.9	-0.2	1.1	0.99
168	2019	ais2	27625	101.3	101.6	9.9	9.9	-0.3	1.1	0.99
169	2020	ais2	20502	103.8	104.2	9.5	9.4	-0.5	1.3	0.99
170	2021	ais2	69	.	.	.	.	.	.	0.97
171	2015	ais3	5928	96.4	96.8	10.1	10.0	-0.4	1.2	0.99
172	2016	ais3	9163	98.3	98.6	10.0	9.9	-0.3	1.1	0.99
173	2017	ais3	13335	100.0	100.3	10.0	9.9	-0.3	1.2	0.99
174	2018	ais3	18485	100.3	100.7	10.1	10.0	-0.3	1.2	0.99
175	2019	ais3	11931	102.3	102.6	10.0	9.8	-0.3	1.4	0.99
176	2020	ais3	95	.	.	.	.	.	.	0.98
177	2015	ais	12127	95.6	95.9	9.5	9.4	-0.3	1.1	0.99
178	2016	ais	18194	97.4	97.7	9.6	9.5	-0.2	1.0	0.99
179	2017	ais	26449	99.3	99.6	9.6	9.5	-0.3	1.0	0.99
180	2018	ais	36845	99.9	100.2	9.4	9.3	-0.3	1.0	0.99
181	2019	ais	40758	101.0	101.3	9.4	9.4	-0.3	1.1	0.99
182	2020	ais	47539	103.2	103.5	9.0	8.9	-0.4	1.2	0.99
183	2021	ais	54901	103.7	103.9	8.4	8.3	-0.2	1.4	0.99
184	2022	ais	46138	104.6	104.8	8.5	8.3	-0.2	1.4	0.99
185	2023	ais	90	.	.	.	.	.	.	0.98

HOL sum sta for SS and previous breeding value for genotyped females with phenotype, by birth year

Obs	BYR	name	no	mean_ss	mean_oss	std_ss	std_oss	mean_dif	std_dif	corr_SS
186	2015	hst0	2263	100.5	100.6	9.7	9.7	-0.1	1.2	0.99
187	2016	hst0	3501	100.7	100.7	9.7	9.7	0.0	1.3	0.99
188	2017	hst0	3998	101.2	101.4	9.3	9.4	-0.2	1.3	0.99
189	2018	hst0	5561	101.2	101.2	9.5	9.6	0.0	1.3	0.99
190	2019	hst0	6519	102.0	101.9	9.5	9.7	0.0	1.4	0.99
191	2020	hst0	8629	101.5	101.4	9.1	9.1	0.2	1.4	0.99
192	2021	hst0	9683	101.0	101.1	9.1	9.3	-0.1	1.6	0.99
193	2022	hst0	7377	100.2	100.8	8.8	9.1	-0.6	2.3	0.97
194	2023	hst0	1	.	.	.	.	.	.	.
195	2015	hst1	1967	98.4	98.8	9.3	9.3	-0.4	1.1	0.99
196	2016	hst1	3131	99.4	99.8	8.9	9.0	-0.3	1.1	0.99
197	2017	hst1	3544	99.9	100.3	8.8	8.8	-0.4	1.2	0.99
198	2018	hst1	4855	101.6	101.9	8.8	8.9	-0.3	1.1	0.99
199	2019	hst1	5736	101.7	102.0	8.5	8.7	-0.3	1.2	0.99
200	2020	hst1	7426	102.5	102.6	8.4	8.6	-0.1	1.3	0.99
201	2021	hst1	4816	102.2	102.0	8.3	8.5	0.2	1.9	0.97
202	2022	hst1	2	.	.	.	.	.	.	-1.00
203	2015	hst2	1536	97.6	97.7	10.2	10.2	-0.2	1.1	0.99
204	2016	hst2	2466	99.5	99.6	9.8	9.7	-0.1	1.1	0.99
205	2017	hst2	2769	99.7	99.9	9.4	9.3	-0.3	1.2	0.99
206	2018	hst2	3900	101.6	101.7	9.3	9.3	-0.1	1.2	0.99
207	2019	hst2	4525	102.1	102.3	9.1	9.1	-0.2	1.3	0.99
208	2020	hst2	3367	103.6	103.8	8.9	8.9	-0.2	1.7	0.98
209	2021	hst2	5	.	.	.	.	.	.	0.91
210	2015	hst3	1029	98.8	99.3	9.9	9.7	-0.4	1.2	0.99
211	2016	hst3	1654	99.9	100.3	9.4	9.2	-0.4	1.2	0.99
212	2017	hst3	1873	100.2	100.6	8.9	8.7	-0.4	1.3	0.99
213	2018	hst3	2655	101.9	102.1	9.1	9.0	-0.2	1.4	0.99
214	2019	hst3	1585	102.7	103.0	8.5	8.4	-0.3	1.7	0.98
215	2020	hst3	5	.	.	.	.	.	.	0.94
216	2015	hst	2455	97.8	98.2	9.6	9.5	-0.4	1.1	0.99
217	2016	hst	3860	98.9	99.2	9.3	9.2	-0.3	1.1	0.99
218	2017	hst	4457	99.6	99.9	9.0	8.9	-0.4	1.1	0.99
219	2018	hst	6156	101.2	101.4	8.9	8.9	-0.2	1.2	0.99
220	2019	hst	7220	101.5	101.8	8.6	8.6	-0.3	1.3	0.99
221	2020	hst	9294	102.7	102.8	8.4	8.3	-0.1	1.5	0.98
222	2021	hst	10080	102.2	102.3	8.2	8.2	0.0	1.7	0.98

HOL sum sta for SS and previous breeding value for genotyped females with phenotype, by birth year

Obs	BYR	name	no	mean_ss	mean_oss	std_ss	std_oss	mean_dif	std_dif	corr_SS
223	2022	hst	7380	102.2	102.5	8.0	8.1	-0.3	1.6	0.98
224	2023	hst	1	.	.	.	.	.	.	.
225	2015	fert	10388	94.3	94.6	9.6	9.5	-0.4	1.1	0.99
226	2016	fert	15592	96.3	96.7	9.6	9.6	-0.4	1.0	0.99
227	2017	fert	22744	98.4	98.8	10.1	10.0	-0.4	1.0	0.99
228	2018	fert	31665	100.3	100.7	9.6	9.6	-0.4	1.0	0.99
229	2019	fert	34769	101.4	101.8	9.7	9.6	-0.5	1.0	0.99
230	2020	fert	40063	104.1	104.6	9.2	9.1	-0.5	1.1	0.99
231	2021	fert	29018	105.1	105.4	8.6	8.5	-0.3	1.4	0.99
232	2022	fert	28	.	.	.	.	.	.	0.99

HOL sum sta for SS and previous breeding value for genotyped females with phenotype, by birth year

Obs	diff	d_cr	d_nrr	d_icf	d_ifl	d_ais	d_hst	d_fert
1	-23	.	.	.	1	.	.	1
2	-22	.	.	.	.	.	.	1
3	-21	.	.	.	1	.	.	.
4	-20	.	.	1	.	1	.	.
5	-17	1	.	2	1	.	.	.
6	-16	1	.	.	.	1	.	.
7	-15	.	1	.	1	1	.	.
8	-14	4	1	.	.	3	.	2
9	-13	1	1	.	.	1	.	.
10	-12	.	.	.	1	.	.	1
11	-11	1	4	2	4	2	.	1
12	-10	3	2	.	3	1	.	2
13	-9	2	5	.	5	3	1	1
14	-8	.	5	4	1	4	1	3
15	-7	2	8	4	4	5	6	2
16	-6	11	71	3	13	13	21	6
17	-5	169	786	5	173	77	130	26
18	-4	1631	3692	67	1632	916	472	386
19	-3	10733	12441	789	9946	6810	1668	3794
20	-2	41551	37081	9868	38226	31649	5960	22575
21	-1	86918	74868	53238	81229	79453	12848	59566
22	0	82309	82293	82683	86091	93357	14850	63082
23	1	36091	47349	33564	44514	52101	9526	27425
24	2	9764	17859	3823	13635	15600	3891	5923
25	3	2018	5799	200	3926	2747	1178	1187
26	4	285	1338	6	1642	270	282	242
27	5	19	198	1	430	6	60	28
28	6	2	14	2	52	2	8	1
29	7	1	3	.	6	4	1	2
30	8	2	2	.	2	1	.	5
31	9	5	2	.	3	5	.	.
32	10	1	2	.	2	.	.	1
33	11	.	1	2	.	.	.	.
34	12	.	3	1	2	1	.	.
35	13	1	1	.	1	.	.	1
36	14	2	2	.	1	2	.	1
37	15	1	1	1	.	1	.	.

HOL sum sta for SS and previous breeding value for genotyped females with phenotype, by birth year

Obs	diff	d_cr	d_nrr	d_icf	d_ifl	d_ais	d_hst	d_fert
38	17	1	.	1	.	1	.	.
39	18	.	.	.	1	.	.	.
40	19	.	.	.	2	2	.	1
41	20	.	1	.	.	1	.	.
42	21	.	.	.	.	.	.	1
43	23	.	.	.	1	.	.	.

HOL sum sta for SS and previous breeding value for genotyped females with phenotype, by birth year

Obs	diff	p_cr	p_nrr	p_icf	p_ifl	p_ais	p_hst	p_fert
1	-23	.	.	.	0	.	.	0
2	-22	.	.	.	.	.	.	0
3	-21	.	.	.	0	.	.	.
4	-20	.	.	0	.	0	.	.
5	-17	0	.	0	0	.	.	.
6	-16	0	.	.	.	0	.	.
7	-15	.	0	.	0	0	.	.
8	-14	0	0	.	.	0	.	0
9	-13	0	0	.	.	0	.	.
10	-12	.	.	.	0	.	.	0
11	-11	0	0	0	0	0	.	0
12	-10	0	0	.	0	0	.	0
13	-9	0	0	.	0	0	0	0
14	-8	.	0	0	0	0	0	0
15	-7	0	0	0	0	0	0	0
16	-6	0	0	0	0	0	0	0
17	-5	0	0	0	0	0	0	0
18	-4	1	1	0	1	0	1	0
19	-3	4	4	0	4	2	3	2
20	-2	15	13	5	14	11	12	12
21	-1	32	26	29	29	28	25	32
22	0	30	29	45	31	33	29	34
23	1	13	17	18	16	18	19	15
24	2	4	6	2	5	6	8	3
25	3	1	2	0	1	1	2	1
26	4	0	0	0	1	0	1	0
27	5	0	0	0	0	0	0	0
28	6	0	0	0	0	0	0	0
29	7	0	0	.	0	0	0	0
30	8	0	0	.	0	0	.	0
31	9	0	0	.	0	0	.	.
32	10	0	0	.	0	.	.	0
33	11	.	0	0	.	.	.	.
34	12	.	0	0	0	0	.	.
35	13	0	0	.	0	.	.	0
36	14	0	0	.	0	0	.	0
37	15	0	0	0	.	0	.	.

HOL sum sta for SS and previous breeding value for genotyped females with phenotype, by birth year

Obs	diff	p_cr	p_nrr	p_icf	p_ifl	p_ais	p_hst	p_fert
38	17	0	.	0	.	0	.	.
39	18	.	.	.	0	.	.	.
40	19	.	.	.	0	0	.	0
41	20	.	0	.	.	0	.	.
42	21	.	.	.	.	.	.	0
43	23	.	.	.	0	.	.	.

HOL summery stastistics for SS and previous breeding value for nongenotyped females with phenotype, by birth year

Obs	BYR	name	no	mean_ss	mean_oss	std_ss	std_oss	mean_dif	std_dif	corr_SS
1	2015	cr0	198614	91.8	92.2	7.3	7.3	-0.3	0.5	1.00
2	2016	cr0	192213	93.8	94.2	7.9	8.0	-0.4	0.5	1.00
3	2017	cr0	171167	95.6	96.1	8.1	8.1	-0.5	0.6	1.00
4	2018	cr0	164615	95.2	95.8	7.6	7.6	-0.6	0.6	1.00
5	2019	cr0	158321	97.6	98.2	7.9	8.0	-0.6	0.7	1.00
6	2020	cr0	157736	99.5	100.1	7.3	7.3	-0.6	0.7	0.99
7	2021	cr0	174236	102.0	102.7	7.6	7.7	-0.7	0.9	0.99
8	2022	cr0	86051	103.2	104.0	7.5	7.4	-0.8	1.2	0.99
9	2015	cr1	176326	91.7	92.1	6.5	6.5	-0.5	0.5	1.00
10	2016	cr1	170444	93.6	94.1	6.9	6.9	-0.5	0.6	1.00
11	2017	cr1	154328	95.3	95.9	7.0	7.0	-0.6	0.6	1.00
12	2018	cr1	148147	96.2	96.8	6.6	6.7	-0.6	0.6	1.00
13	2019	cr1	140853	97.4	97.9	6.8	6.8	-0.6	0.8	0.99
14	2020	cr1	139437	99.6	100.2	6.9	6.8	-0.5	0.9	0.99
15	2021	cr1	64404	101.0	101.5	6.7	6.7	-0.5	1.1	0.99
16	2022	cr1	9	.	.	.	.	.	.	0.98
17	2015	cr2	134969	92.2	92.7	6.7	6.7	-0.5	0.6	1.00
18	2016	cr2	132430	94.0	94.5	7.2	7.2	-0.5	0.6	1.00
19	2017	cr2	121416	95.9	96.4	7.2	7.2	-0.5	0.6	1.00
20	2018	cr2	116189	96.8	97.3	7.1	7.1	-0.6	0.7	1.00
21	2019	cr2	107708	97.8	98.3	7.0	7.0	-0.5	0.9	0.99
22	2020	cr2	46882	100.1	100.6	7.1	7.1	-0.5	1.0	0.99
23	2021	cr2	39	.	.	.	.	.	.	0.98
24	2015	cr3	88915	92.9	93.5	6.7	6.7	-0.5	0.6	1.00
25	2016	cr3	88943	94.6	95.2	7.0	7.0	-0.6	0.6	1.00
26	2017	cr3	81972	96.5	97.1	7.1	7.1	-0.6	0.6	1.00
27	2018	cr3	76144	97.6	98.2	7.0	7.0	-0.6	0.7	1.00
28	2019	cr3	29253	99.1	99.7	6.8	6.8	-0.6	0.9	0.99
29	2020	cr3	43	.	.	.	.	.	.	0.99
30	2015	cr	219244	91.5	92.1	6.5	6.5	-0.5	0.5	1.00
31	2016	cr	211691	93.3	93.9	7.0	7.0	-0.6	0.6	1.00
32	2017	cr	189464	95.3	95.9	7.0	7.0	-0.6	0.6	1.00
33	2018	cr	181048	96.2	96.9	6.9	6.9	-0.6	0.6	1.00
34	2019	cr	172496	97.3	97.8	6.9	6.9	-0.5	0.8	0.99
35	2020	cr	170567	99.6	100.1	6.9	6.9	-0.5	1.0	0.99
36	2021	cr	179445	101.0	101.5	6.4	6.3	-0.5	1.3	0.98

HOL summery stastistics for SS and previous breeding value for nongenotyped females with phenotype, by birth year

Obs	BYR	name	no	mean_ss	mean_oss	std_ss	std_oss	mean_dif	std_dif	corr_SS
37	2022	cr	86057	102.3	102.9	6.5	6.4	-0.6	1.3	0.98
38	2015	nrr0	189280	96.4	96.6	7.1	7.2	-0.1	0.5	1.00
39	2016	nrr0	183824	97.3	97.4	7.6	7.6	-0.2	0.6	1.00
40	2017	nrr0	163237	98.3	98.6	7.7	7.7	-0.3	0.6	1.00
41	2018	nrr0	156968	96.9	97.2	7.5	7.5	-0.3	0.6	1.00
42	2019	nrr0	151197	98.6	98.9	7.5	7.5	-0.3	0.7	1.00
43	2020	nrr0	150260	99.6	100.0	7.0	7.0	-0.4	0.8	0.99
44	2021	nrr0	167827	101.3	101.7	7.2	7.2	-0.4	1.0	0.99
45	2022	nrr0	122730	101.3	101.7	7.1	7.2	-0.4	1.3	0.98
46	2023	nrr0	233	.	.	.	.	.	.	0.97
47	2015	nrr1	169311	95.3	95.6	6.5	6.5	-0.3	0.5	1.00
48	2016	nrr1	163447	96.3	96.7	6.5	6.5	-0.3	0.6	1.00
49	2017	nrr1	148144	97.5	97.9	6.3	6.3	-0.3	0.6	1.00
50	2018	nrr1	142423	97.4	97.8	6.1	6.1	-0.4	0.7	0.99
51	2019	nrr1	135476	98.4	98.7	6.4	6.3	-0.3	0.8	0.99
52	2020	nrr1	135355	99.8	100.1	6.5	6.4	-0.3	1.0	0.99
53	2021	nrr1	89843	100.5	100.9	6.2	6.1	-0.4	1.3	0.98
54	2022	nrr1	498	101.2	101.8	6.6	6.4	-0.6	1.7	0.96
55	2015	nrr2	129398	94.6	94.8	6.8	6.8	-0.2	0.6	1.00
56	2016	nrr2	127099	95.7	95.9	6.9	6.9	-0.2	0.6	1.00
57	2017	nrr2	116744	97.5	97.7	6.6	6.6	-0.2	0.7	1.00
58	2018	nrr2	111847	97.2	97.5	6.7	6.6	-0.3	0.7	0.99
59	2019	nrr2	105598	98.4	98.7	6.8	6.8	-0.3	1.0	0.99
60	2020	nrr2	67484	100.0	100.5	6.9	6.8	-0.5	1.3	0.98
61	2021	nrr2	780	101.4	101.8	6.3	6.0	-0.4	1.9	0.96
62	2015	nrr3	84938	95.1	95.5	7.2	7.2	-0.4	0.7	1.00
63	2016	nrr3	85154	96.3	96.7	7.6	7.5	-0.5	0.7	1.00
64	2017	nrr3	78645	97.7	98.1	7.0	7.0	-0.4	0.8	0.99
65	2018	nrr3	75232	97.7	98.1	7.3	7.3	-0.4	0.9	0.99
66	2019	nrr3	42931	99.1	99.5	7.4	7.3	-0.4	1.2	0.99
67	2020	nrr3	760	100.3	100.7	7.3	7.3	-0.5	1.5	0.98
68	2015	nrr	215879	94.7	95.0	6.5	6.4	-0.3	0.6	1.00
69	2016	nrr	208749	95.8	96.1	6.7	6.7	-0.4	0.6	1.00
70	2017	nrr	186771	97.3	97.6	6.3	6.3	-0.3	0.6	1.00
71	2018	nrr	178655	97.2	97.5	6.3	6.3	-0.4	0.7	0.99
72	2019	nrr	170203	98.3	98.6	6.5	6.5	-0.3	0.9	0.99

HOL summery stastistics for SS and previous breeding value for nongenotyped females with phenotype, by birth year

Obs	BYR	name	no	mean_ss	mean_oss	std_ss	std_oss	mean_dif	std_dif	corr_SS
73	2020	nrr	168681	99.9	100.2	6.5	6.3	-0.3	1.2	0.98
74	2021	nrr	178179	100.7	100.9	5.8	5.6	-0.3	1.6	0.96
75	2022	nrr	122833	101.9	102.1	5.9	5.7	-0.2	1.6	0.96
76	2023	nrr	233	.	.	.	.	.	.	0.97
77	2015	icf1	171071	97.0	97.2	6.3	6.3	-0.2	0.5	1.00
78	2016	icf1	165154	97.8	98.0	6.3	6.3	-0.2	0.5	1.00
79	2017	icf1	149655	98.1	98.3	6.2	6.2	-0.2	0.5	1.00
80	2018	icf1	143912	99.9	100.1	6.6	6.6	-0.2	0.6	1.00
81	2019	icf1	136937	99.0	99.1	6.1	6.1	-0.1	0.7	0.99
82	2020	icf1	136887	99.8	99.9	6.2	6.1	-0.1	0.9	0.99
83	2021	icf1	88794	99.9	100.1	5.8	5.7	-0.1	0.9	0.99
84	2022	icf1	131	.	.	.	.	.	.	0.96
85	2015	icf2	131167	96.6	96.8	6.7	6.6	-0.2	0.5	1.00
86	2016	icf2	128756	97.5	97.7	6.9	6.9	-0.2	0.5	1.00
87	2017	icf2	118210	97.8	98.0	6.8	6.8	-0.2	0.5	1.00
88	2018	icf2	113335	99.8	99.9	7.1	7.1	-0.2	0.6	1.00
89	2019	icf2	107057	99.0	99.2	6.7	6.7	-0.1	0.8	0.99
90	2020	icf2	66118	100.3	100.4	6.7	6.6	-0.1	0.9	0.99
91	2021	icf2	278	101.1	101.1	6.6	6.6	0.0	1.2	0.98
92	2015	icf3	86514	97.0	97.3	6.9	6.9	-0.3	0.5	1.00
93	2016	icf3	86752	97.9	98.2	7.3	7.3	-0.3	0.6	1.00
94	2017	icf3	80122	98.4	98.6	7.2	7.1	-0.3	0.6	1.00
95	2018	icf3	76728	100.3	100.5	7.5	7.5	-0.2	0.6	1.00
96	2019	icf3	42499	99.9	100.1	6.8	6.8	-0.2	0.9	0.99
97	2020	icf3	361	102.0	101.9	6.3	6.2	0.1	1.1	0.99
98	2015	icf	178446	96.5	96.7	6.6	6.6	-0.2	0.5	1.00
99	2016	icf	172287	97.3	97.6	6.8	6.8	-0.2	0.5	1.00
100	2017	icf	155763	97.7	97.9	6.8	6.7	-0.2	0.5	1.00
101	2018	icf	149483	99.6	99.8	7.1	7.1	-0.2	0.6	1.00
102	2019	icf	141533	98.8	99.0	6.7	6.6	-0.2	0.8	0.99
103	2020	icf	139381	99.7	99.8	6.7	6.6	-0.1	1.0	0.99
104	2021	icf	88839	99.8	99.9	6.3	6.1	-0.1	1.0	0.99
105	2022	icf	131	.	.	.	.	.	.	0.97
106	2015	ifl0	183679	95.9	96.0	6.5	6.5	-0.1	0.5	1.00
107	2016	ifl0	178487	96.9	97.0	7.2	7.2	-0.1	0.6	1.00
108	2017	ifl0	158533	97.9	98.1	7.4	7.4	-0.3	0.6	1.00

HOL summery stastistics for SS and previous breeding value for nongenotyped females with phenotype, by birth year

Obs	BYR	name	no	mean_ss	mean_oss	std_ss	std_oss	mean_dif	std_dif	corr_SS
109	2018	ifl0	152599	97.2	97.5	7.1	7.1	-0.3	0.6	1.00
110	2019	ifl0	147343	98.6	98.9	7.2	7.3	-0.3	0.7	1.00
111	2020	ifl0	146748	99.6	99.9	6.6	6.6	-0.4	0.8	0.99
112	2021	ifl0	163870	101.2	101.6	6.8	6.8	-0.4	1.0	0.99
113	2022	ifl0	120066	101.4	101.9	6.8	6.7	-0.5	1.4	0.98
114	2023	ifl0	229	.	.	.	.	.	.	0.96
115	2015	ifl1	169966	93.1	93.4	6.6	6.6	-0.4	0.5	1.00
116	2016	ifl1	164123	94.7	95.1	7.2	7.1	-0.4	0.6	1.00
117	2017	ifl1	148751	96.0	96.4	7.3	7.3	-0.4	0.6	1.00
118	2018	ifl1	143101	97.4	97.8	7.2	7.2	-0.4	0.6	1.00
119	2019	ifl1	136145	97.8	98.2	7.2	7.2	-0.4	0.8	0.99
120	2020	ifl1	136050	99.7	100.1	7.2	7.2	-0.4	1.0	0.99
121	2021	ifl1	90790	100.6	101.0	7.0	6.8	-0.3	1.4	0.98
122	2022	ifl1	522	101.7	101.6	6.8	6.6	0.1	1.7	0.97
123	2015	ifl2	130220	92.7	92.9	7.1	7.1	-0.3	0.6	1.00
124	2016	ifl2	127950	94.5	94.8	7.8	7.8	-0.3	0.6	1.00
125	2017	ifl2	117490	96.0	96.4	8.0	8.0	-0.4	0.6	1.00
126	2018	ifl2	112623	97.5	97.9	8.0	8.0	-0.3	0.7	1.00
127	2019	ifl2	106363	98.0	98.4	7.7	7.7	-0.3	1.0	0.99
128	2020	ifl2	68383	100.4	100.8	7.7	7.7	-0.4	1.2	0.99
129	2021	ifl2	809	102.7	102.8	7.4	7.1	-0.1	1.7	0.97
130	2015	ifl3	85981	92.9	93.3	7.3	7.3	-0.4	0.6	1.00
131	2016	ifl3	86197	94.7	95.1	7.9	7.8	-0.4	0.7	1.00
132	2017	ifl3	79608	96.5	96.9	8.2	8.2	-0.4	0.7	1.00
133	2018	ifl3	76249	98.1	98.5	8.3	8.2	-0.4	0.8	1.00
134	2019	ifl3	43787	99.3	99.7	7.7	7.6	-0.4	1.2	0.99
135	2020	ifl3	793	102.0	102.3	7.9	7.8	-0.3	1.4	0.98
136	2015	ifl	214578	92.3	92.6	6.8	6.8	-0.4	0.5	1.00
137	2016	ifl	207460	94.0	94.4	7.4	7.4	-0.4	0.6	1.00
138	2017	ifl	185746	95.6	96.0	7.7	7.7	-0.4	0.6	1.00
139	2018	ifl	177591	97.1	97.5	7.7	7.7	-0.4	0.7	1.00
140	2019	ifl	169188	97.6	98.0	7.5	7.4	-0.4	0.9	0.99
141	2020	ifl	167800	99.6	100.0	7.4	7.4	-0.4	1.1	0.99
142	2021	ifl	175152	100.5	100.7	6.8	6.6	-0.3	1.5	0.98
143	2022	ifl	120173	101.8	102.0	6.8	6.6	-0.3	1.4	0.98
144	2023	ifl	229	.	.	.	.	.	.	0.98

HOL summery stastistics for SS and previous breeding value for nongenotyped females with phenotype, by birth year

Obs	BYR	name	no	mean_ss	mean_oss	std_ss	std_oss	mean_dif	std_dif	corr_SS
145	2015	ais0	184076	97.2	97.3	6.7	6.8	-0.2	0.5	1.00
146	2016	ais0	179080	98.1	98.3	7.3	7.4	-0.2	0.5	1.00
147	2017	ais0	158875	98.8	99.0	7.4	7.4	-0.3	0.6	1.00
148	2018	ais0	152626	97.7	98.0	7.1	7.1	-0.3	0.6	1.00
149	2019	ais0	147184	98.9	99.2	7.2	7.2	-0.2	0.7	1.00
150	2020	ais0	146426	99.7	100.0	6.7	6.7	-0.3	0.8	0.99
151	2021	ais0	164336	101.0	101.2	6.7	6.7	-0.2	0.9	0.99
152	2022	ais0	122160	100.8	101.1	6.7	6.7	-0.3	1.3	0.98
153	2023	ais0	233	.	.	.	.	.	.	0.97
154	2015	ais1	167555	95.2	95.5	6.5	6.5	-0.3	0.5	1.00
155	2016	ais1	161863	96.5	96.8	7.0	7.0	-0.3	0.5	1.00
156	2017	ais1	146814	97.7	98.0	7.0	7.0	-0.3	0.6	1.00
157	2018	ais1	141214	98.2	98.5	6.8	6.8	-0.3	0.6	1.00
158	2019	ais1	134461	98.4	98.7	7.0	7.0	-0.3	0.7	0.99
159	2020	ais1	134461	99.8	100.1	7.0	6.9	-0.3	0.9	0.99
160	2021	ais1	85419	100.3	100.5	6.6	6.5	-0.2	1.1	0.99
161	2022	ais1	101	.	.	.	.	.	.	0.98
162	2015	ais2	128203	95.2	95.4	7.2	7.2	-0.2	0.5	1.00
163	2016	ais2	126067	96.6	96.8	7.7	7.7	-0.2	0.6	1.00
164	2017	ais2	115826	97.9	98.1	7.5	7.6	-0.2	0.6	1.00
165	2018	ais2	111072	98.2	98.4	7.4	7.5	-0.2	0.7	1.00
166	2019	ais2	104947	98.5	98.7	7.5	7.5	-0.2	0.9	0.99
167	2020	ais2	63626	100.3	100.6	7.4	7.3	-0.3	1.1	0.99
168	2021	ais2	256	102.0	102.2	6.9	6.6	-0.2	1.5	0.97
169	2015	ais3	84287	95.8	96.1	7.3	7.2	-0.3	0.6	1.00
170	2016	ais3	84608	97.1	97.4	7.7	7.6	-0.3	0.6	1.00
171	2017	ais3	78135	98.4	98.7	7.6	7.6	-0.3	0.7	1.00
172	2018	ais3	74773	98.5	98.9	7.6	7.6	-0.3	0.8	0.99
173	2019	ais3	40461	99.6	99.8	7.6	7.5	-0.2	1.1	0.99
174	2020	ais3	321	101.5	101.7	6.9	6.7	-0.1	1.4	0.98
175	2015	ais	214289	95.0	95.3	6.6	6.6	-0.3	0.5	1.00
176	2016	ais	207364	96.3	96.6	7.1	7.1	-0.3	0.5	1.00
177	2017	ais	185669	97.6	97.9	7.1	7.1	-0.3	0.6	1.00
178	2018	ais	177492	97.9	98.2	7.0	6.9	-0.3	0.6	1.00
179	2019	ais	169126	98.3	98.6	7.1	7.0	-0.2	0.8	0.99
180	2020	ais	167554	99.9	100.1	6.8	6.7	-0.3	1.0	0.99

HOL summery stastistics for SS and previous breeding value for nongenotyped females with phenotype, by birth year

Obs	BYR	name	no	mean_ss	mean_oss	std_ss	std_oss	mean_dif	std_dif	corr_SS
181	2021	ais	175565	100.3	100.5	6.2	6.1	-0.2	1.2	0.98
182	2022	ais	122204	101.1	101.4	6.3	6.1	-0.2	1.2	0.98
183	2023	ais	233	.	.	.	.	.	.	0.98
184	2015	hst0	34740	99.8	99.8	7.0	7.1	0.0	0.6	1.00
185	2016	hst0	33941	99.5	99.5	7.0	7.1	0.0	0.7	1.00
186	2017	hst0	32054	99.5	99.5	7.3	7.4	0.0	0.8	0.99
187	2018	hst0	32277	99.5	99.5	7.0	7.1	0.1	0.8	0.99
188	2019	hst0	31492	99.9	99.7	7.1	7.2	0.1	1.0	0.99
189	2020	hst0	32550	99.2	99.0	6.6	6.6	0.2	1.1	0.99
190	2021	hst0	31391	99.2	99.0	6.4	6.5	0.3	1.5	0.97
191	2022	hst0	19540	98.7	98.5	6.0	6.2	0.2	1.9	0.95
192	2023	hst0	2	.	.	.	.	.	.	1.00
193	2015	hst1	33675	96.9	97.3	6.8	6.8	-0.4	0.6	1.00
194	2016	hst1	32617	97.3	97.7	6.8	6.8	-0.3	0.6	1.00
195	2017	hst1	31356	97.5	97.8	6.7	6.8	-0.3	0.7	0.99
196	2018	hst1	31507	98.3	98.6	6.8	6.9	-0.3	0.8	0.99
197	2019	hst1	30210	98.2	98.5	6.6	6.7	-0.2	0.9	0.99
198	2020	hst1	31358	98.3	98.3	6.4	6.5	-0.1	1.2	0.98
199	2021	hst1	15812	98.6	98.5	6.0	6.1	0.1	1.5	0.97
200	2022	hst1	11	.	.	.	.	.	.	0.89
201	2015	hst2	24709	96.5	96.6	7.4	7.4	-0.2	0.6	1.00
202	2016	hst2	24479	97.2	97.4	7.5	7.4	-0.2	0.7	1.00
203	2017	hst2	23796	97.4	97.6	7.4	7.4	-0.2	0.8	0.99
204	2018	hst2	23772	98.4	98.5	7.3	7.3	-0.1	0.8	0.99
205	2019	hst2	22137	98.5	98.6	6.9	7.0	-0.1	1.1	0.99
206	2020	hst2	11524	99.0	99.1	7.0	7.0	-0.1	1.5	0.98
207	2021	hst2	28	.	.	.	.	.	.	0.95
208	2015	hst3	15542	96.9	97.4	7.5	7.4	-0.5	0.7	1.00
209	2016	hst3	15563	97.3	97.7	7.4	7.3	-0.4	0.8	0.99
210	2017	hst3	14991	97.4	97.8	7.3	7.2	-0.4	0.9	0.99
211	2018	hst3	14350	98.5	98.8	7.5	7.4	-0.3	1.0	0.99
212	2019	hst3	6429	98.8	99.1	7.0	7.0	-0.2	1.4	0.98
213	2020	hst3	39	.	.	.	.	.	.	0.97
214	2015	hst	44629	96.2	96.6	7.0	6.9	-0.4	0.6	1.00
215	2016	hst	43310	96.7	97.1	6.9	6.9	-0.4	0.6	1.00
216	2017	hst	41217	96.9	97.2	6.8	6.8	-0.3	0.7	0.99

HOL summery stastistics for SS and previous breeding value for nongenotyped females with phenotype, by birth year

Obs	BYR	name	no	mean_ss	mean_oss	std_ss	std_oss	mean_dif	std_dif	corr_SS
217	2018	hst	40735	97.9	98.2	7.0	7.0	-0.3	0.8	0.99
218	2019	hst	38732	97.9	98.2	6.6	6.6	-0.3	1.1	0.99
219	2020	hst	39739	98.1	98.3	6.4	6.4	-0.2	1.4	0.98
220	2021	hst	34506	98.3	98.4	6.0	6.0	-0.1	1.5	0.97
221	2022	hst	19548	98.4	98.5	5.6	5.7	-0.2	1.3	0.97
222	2023	hst	2	.	.	.	.	.	.	1.00
223	2015	fert	178446	92.8	93.2	6.8	6.8	-0.3	0.5	1.00
224	2016	fert	172287	94.5	94.9	7.4	7.4	-0.4	0.6	1.00
225	2017	fert	155763	96.0	96.4	7.7	7.7	-0.4	0.6	1.00
226	2018	fert	149483	97.3	97.7	7.6	7.5	-0.4	0.7	1.00
227	2019	fert	141533	97.8	98.2	7.5	7.4	-0.4	0.9	0.99
228	2020	fert	139381	99.7	100.1	7.4	7.3	-0.4	1.1	0.99
229	2021	fert	88839	100.5	100.7	6.9	6.8	-0.3	1.3	0.98
230	2022	fert	131	.	.	.	.	.	.	0.98

HOL summery stastistics for SS and previous breeding value for nongenotyped females with phenotype, by birth year

Obs	diff	d_cr	d_nrr	d_icf	d_ifl	d_ais	d_hst	d_fert
1	-27	.	.	.	.	.	.	1
2	-26	.	.	.	1	.	.	.
3	-23	1	.	.	.	.	.	.
4	-22	.	.	.	.	1	.	.
5	-16	.	.	1	.	.	.	.
6	-14	.	1	.	.	.	.	.
7	-13	.	.	.	1	.	.	.
8	-12	1	2	.	1	1	1	.
9	-11	.	.	.	2	2	1	1
10	-10	1	2	.	2	.	3	1
11	-9	4	5	4	3	4	11	.
12	-8	9	6	10	15	10	28	2
13	-7	22	37	47	73	24	53	17
14	-6	66	190	159	285	106	126	97
15	-5	499	1048	421	1219	579	514	441
16	-4	2932	6548	1169	4417	2482	1717	2005
17	-3	18338	24965	3906	17925	10510	3150	7514
18	-2	91042	74994	19117	76624	57400	15732	38167
19	-1	653281	464542	254709	488333	414382	93878	364592
20	0	550546	667017	651315	672869	762941	138097	532871
21	1	71338	135408	84478	116353	138171	36999	66352
22	2	17736	40349	8765	26383	28805	8851	10292
23	3	3601	12501	1402	8585	3442	2552	2859
24	4	388	2195	251	3998	432	502	503
25	5	113	275	70	657	106	149	79
26	6	51	62	26	100	51	33	38
27	7	23	20	7	29	23	16	14
28	8	9	8	5	23	11	3	13
29	9	6	4	.	10	9	.	2
30	10	3	2	1	6	1	1	2
31	11	1	2	.	2	2	1	.
32	12	.	.	.	.	1	.	.
33	14	1	.	.	.	.	.	.
34	15	.	.	.	1	.	.	.

HOL summery stastistics for SS and previous breeding value for nongenotyped females with phenotype, by birth year

Obs	diff	p_cr	p_nrr	p_icf	p_ifl	p_ais	p_hst	p_fert
1	-27	.	.	.	.	.	.	0
2	-26	.	.	.	0	.	.	.
3	-23	0	.	.	.	.	.	.
4	-22	.	.	.	.	0	.	.
5	-16	.	.	0	.	.	.	.
6	-14	.	0	.	.	.	.	.
7	-13	.	.	.	0	.	.	.
8	-12	0	0	.	0	0	0	.
9	-11	.	.	.	0	0	0	0
10	-10	0	0	.	0	.	0	0
11	-9	0	0	0	0	0	0	.
12	-8	0	0	0	0	0	0	0
13	-7	0	0	0	0	0	0	0
14	-6	0	0	0	0	0	0	0
15	-5	0	0	0	0	0	0	0
16	-4	0	0	0	0	0	1	0
17	-3	1	2	0	1	1	1	1
18	-2	6	5	2	5	4	5	4
19	-1	46	32	25	34	29	31	36
20	0	39	47	63	47	54	46	52
21	1	5	9	8	8	10	12	6
22	2	1	3	1	2	2	3	1
23	3	0	1	0	1	0	1	0
24	4	0	0	0	0	0	0	0
25	5	0	0	0	0	0	0	0
26	6	0	0	0	0	0	0	0
27	7	0	0	0	0	0	0	0
28	8	0	0	0	0	0	0	0
29	9	0	0	.	0	0	.	0
30	10	0	0	0	0	0	0	0
31	11	0	0	.	0	0	0	.
32	12	.	.	.	.	0	.	.
33	14	0	.	.	.	.	.	.
34	15	.	.	.	0	.	.	.

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

Obs	BYR	name	no	mean_noff	std_noff	mean_ss	mean_oss	std_ss	std_oss	mean_dif	std_dif	corr_SS
1	2010	cr0	193	930	2893	89.8	90.2	11.7	11.7	-0.4	0.7	1.00
2	2011	cr0	155	565	1191	90.1	90.5	10.7	10.7	-0.4	0.7	1.00
3	2012	cr0	171	816	1446	93.2	93.6	10.7	10.7	-0.4	0.7	1.00
4	2013	cr0	151	839	1539	94.9	95.4	12.4	12.5	-0.5	0.7	1.00
5	2014	cr0	114	1260	1533	96.3	96.8	12.5	12.7	-0.6	0.7	1.00
6	2015	cr0	83	1883	2315	100.3	101.1	12.1	12.1	-0.8	0.7	1.00
7	2016	cr0	66	1806	2290	99.8	100.6	11.9	12.2	-0.8	1.0	1.00
8	2017	cr0	66	1937	2302	100.5	101.3	14.1	14.0	-0.8	0.8	1.00
9	2018	cr0	78	1781	2583	103.8	104.5	13.1	13.2	-0.7	1.3	0.99
10	2019	cr0	56	1669	2463	109.0	109.5	14.4	14.3	-0.6	2.1	0.99
11	2020	cr0	24	748	898	106.0	106.3	10.1	9.7	-0.4	4.6	0.89
12	2010	cr1	193	800	2470	90.1	90.7	10.2	10.2	-0.5	0.5	1.00
13	2011	cr1	155	490	1017	91.3	91.8	8.8	8.8	-0.5	0.5	1.00
14	2012	cr1	171	711	1250	94.3	94.9	9.5	9.5	-0.6	0.5	1.00
15	2013	cr1	151	735	1339	96.6	97.1	10.1	10.1	-0.5	0.6	1.00
16	2014	cr1	113	1106	1326	97.8	98.3	9.6	9.7	-0.5	0.6	1.00
17	2015	cr1	83	1637	2010	103.5	104.3	9.1	9.1	-0.8	0.6	1.00
18	2016	cr1	66	1559	1953	102.5	103.2	8.6	8.7	-0.7	0.9	1.00
19	2017	cr1	66	1650	1948	103.8	104.4	11.5	11.4	-0.6	0.9	1.00
20	2018	cr1	78	1229	1762	106.9	107.5	9.5	9.6	-0.6	1.7	0.98
21	2019	cr1	24	765	975	109.5	109.7	9.7	10.0	-0.3	2.4	0.97
22	2010	cr2	193	604	1882	90.1	90.5	9.9	9.9	-0.5	0.6	1.00
23	2011	cr2	155	374	795	91.8	92.3	9.3	9.2	-0.5	0.6	1.00
24	2012	cr2	171	551	973	94.6	95.1	10.0	10.1	-0.5	0.6	1.00
25	2013	cr2	151	572	1052	96.1	96.6	10.6	10.5	-0.5	0.6	1.00
26	2014	cr2	113	874	1052	98.2	98.8	9.8	9.8	-0.5	0.6	1.00
27	2015	cr2	83	1303	1621	103.4	104.1	9.2	9.2	-0.7	0.6	1.00
28	2016	cr2	66	1230	1547	102.7	103.3	9.4	9.4	-0.6	1.1	0.99
29	2017	cr2	66	1119	1311	104.4	105.0	11.2	11.0	-0.6	1.3	0.99
30	2018	cr2	42	555	728	107.8	108.1	7.6	7.5	-0.3	1.9	0.97
31	2010	cr3	193	391	1233	89.8	90.3	9.7	9.7	-0.5	0.6	1.00
32	2011	cr3	154	247	532	91.9	92.5	9.2	9.1	-0.6	0.6	1.00
33	2012	cr3	171	367	647	94.8	95.4	10.0	10.0	-0.6	0.6	1.00
34	2013	cr3	151	379	672	95.8	96.5	10.6	10.6	-0.7	0.6	1.00
35	2014	cr3	113	604	740	98.4	99.0	9.8	9.8	-0.6	0.7	1.00
36	2015	cr3	82	921	1171	103.5	104.3	9.3	9.4	-0.8	0.7	1.00

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

Obs	BYR	name	no	mean_noff	std_noff	mean_ss	mean_oss	std_ss	std_oss	mean_dif	std_dif	corr_SS
37	2016	cr3	65	733	940	103.1	103.9	9.2	9.3	-0.7	1.3	0.99
38	2017	cr3	39	325	364	102.3	102.7	12.1	11.9	-0.3	1.3	0.99
39	2010	cr	193	997	3073	89.8	90.3	10.0	9.9	-0.5	0.6	1.00
40	2011	cr	155	611	1268	91.5	92.1	9.1	9.0	-0.6	0.6	1.00
41	2012	cr	171	883	1547	94.5	95.1	9.9	9.9	-0.6	0.6	1.00
42	2013	cr	151	908	1639	96.0	96.6	10.4	10.4	-0.6	0.6	1.00
43	2014	cr	114	1352	1627	98.1	98.8	9.7	9.7	-0.7	0.7	1.00
44	2015	cr	83	2005	2444	103.5	104.4	9.1	9.2	-0.9	0.6	1.00
45	2016	cr	66	1911	2400	102.8	103.5	9.0	9.1	-0.7	1.0	0.99
46	2017	cr	66	2037	2395	104.3	104.8	11.2	11.0	-0.5	1.1	1.00
47	2018	cr	78	1847	2652	107.2	107.7	8.7	9.0	-0.6	1.9	0.98
48	2019	cr	56	1681	2480	109.1	109.7	9.8	9.6	-0.6	2.1	0.98
49	2020	cr	24	748	898	111.0	111.1	7.3	7.3	-0.1	2.0	0.96
50	2010	nrr0	193	892	2782	94.6	94.8	11.3	11.3	-0.2	0.7	1.00
51	2011	nrr0	155	540	1143	94.3	94.4	11.1	11.2	-0.2	0.8	1.00
52	2012	nrr0	171	783	1387	96.2	96.3	10.7	10.6	-0.1	0.7	1.00
53	2013	nrr0	151	804	1475	97.2	97.4	12.3	12.4	-0.2	0.7	1.00
54	2014	nrr0	114	1214	1478	96.0	96.2	12.3	12.3	-0.2	0.8	1.00
55	2015	nrr0	83	1812	2234	99.0	99.5	11.7	11.9	-0.6	1.0	1.00
56	2016	nrr0	66	1739	2211	97.7	97.9	12.3	12.2	-0.3	0.8	1.00
57	2017	nrr0	66	1868	2225	97.3	97.9	13.4	13.4	-0.7	1.0	1.00
58	2018	nrr0	78	1726	2512	100.1	100.8	12.9	12.8	-0.7	1.4	0.99
59	2019	nrr0	56	1801	2625	103.1	104.1	14.1	14.1	-1.0	1.8	0.99
60	2020	nrr0	37	969	1367	99.8	100.6	11.2	10.9	-0.8	2.8	0.97
61	2010	nrr1	193	766	2370	94.6	95.0	9.8	9.8	-0.3	0.6	1.00
62	2011	nrr1	155	470	976	95.1	95.3	9.0	9.0	-0.2	0.6	1.00
63	2012	nrr1	171	684	1204	96.8	97.1	9.6	9.5	-0.3	0.6	1.00
64	2013	nrr1	151	706	1288	98.7	99.0	9.7	9.7	-0.4	0.7	1.00
65	2014	nrr1	113	1065	1278	97.8	98.2	8.9	9.0	-0.3	0.8	1.00
66	2015	nrr1	83	1581	1944	102.7	103.2	9.4	9.5	-0.5	0.8	1.00
67	2016	nrr1	66	1506	1889	101.4	101.7	8.9	8.8	-0.3	0.8	1.00
68	2017	nrr1	66	1600	1895	101.9	102.4	10.6	10.6	-0.5	1.0	1.00
69	2018	nrr1	78	1282	1823	103.8	104.1	9.8	9.6	-0.3	1.9	0.98
70	2019	nrr1	35	882	1222	108.0	107.9	10.7	10.5	0.1	3.6	0.94
71	2010	nrr2	193	580	1809	92.7	92.9	9.5	9.6	-0.2	0.7	1.00
72	2011	nrr2	155	359	764	94.4	94.6	9.5	9.4	-0.2	0.8	1.00

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

Obs	BYR	name	no	mean_noff	std_noff	mean_ss	mean_oss	std_ss	std_oss	mean_dif	std_dif	corr_SS
73	2012	nrr2	171	530	937	95.3	95.5	10.2	10.2	-0.2	0.8	1.00
74	2013	nrr2	151	550	1014	96.4	96.6	11.0	11.0	-0.2	0.7	1.00
75	2014	nrr2	113	843	1020	97.3	97.6	9.2	9.2	-0.3	0.7	1.00
76	2015	nrr2	83	1261	1571	101.6	102.0	9.7	9.7	-0.3	0.9	1.00
77	2016	nrr2	66	1194	1506	100.1	100.5	11.2	11.3	-0.4	0.9	1.00
78	2017	nrr2	66	1179	1392	101.5	102.3	11.6	11.3	-0.7	1.6	0.99
79	2018	nrr2	56	688	944	105.3	105.4	9.2	8.9	-0.1	3.0	0.94
80	2010	nrr3	193	374	1180	92.8	93.3	9.7	9.8	-0.5	0.8	1.00
81	2011	nrr3	154	236	509	94.7	95.1	9.9	9.9	-0.4	0.9	1.00
82	2012	nrr3	171	353	623	96.1	96.5	10.9	10.9	-0.4	0.9	1.00
83	2013	nrr3	151	365	662	96.3	96.7	11.6	11.6	-0.4	0.9	1.00
84	2014	nrr3	113	581	713	97.8	98.2	10.2	10.1	-0.5	1.0	1.00
85	2015	nrr3	82	896	1143	102.1	102.5	10.9	11.0	-0.4	1.2	0.99
86	2016	nrr3	65	778	986	101.7	102.4	11.9	11.7	-0.7	1.5	0.99
87	2017	nrr3	56	415	508	102.1	102.7	11.6	11.2	-0.6	3.0	0.97
88	2010	nrr	193	984	3034	93.4	93.8	9.2	9.3	-0.4	0.7	1.00
89	2011	nrr	155	602	1250	94.7	95.1	9.0	9.0	-0.4	0.7	1.00
90	2012	nrr	171	871	1526	96.1	96.4	9.9	9.9	-0.3	0.7	1.00
91	2013	nrr	151	896	1619	97.0	97.4	10.5	10.4	-0.3	0.7	1.00
92	2014	nrr	114	1336	1610	97.8	98.2	9.1	9.0	-0.4	0.7	1.00
93	2015	nrr	83	1984	2422	102.2	102.6	9.6	9.6	-0.4	0.8	1.00
94	2016	nrr	66	1891	2379	101.3	101.7	10.2	10.2	-0.4	0.8	1.00
95	2017	nrr	66	2017	2374	101.7	102.3	10.9	10.7	-0.6	1.8	0.99
96	2018	nrr	78	1840	2645	104.5	104.5	9.4	9.2	0.0	2.2	0.97
97	2019	nrr	56	1836	2675	105.8	106.3	9.9	9.5	-0.4	2.7	0.96
98	2020	nrr	37	970	1368	105.0	105.2	8.3	8.2	-0.2	1.8	0.98
99	2010	icf1	193	776	2400	97.2	97.3	9.5	9.5	-0.2	0.5	1.00
100	2011	icf1	155	475	986	98.5	98.7	8.9	8.9	-0.2	0.5	1.00
101	2012	icf1	171	691	1215	98.7	98.8	9.8	9.8	-0.1	0.5	1.00
102	2013	icf1	151	714	1303	100.0	100.2	9.7	9.7	-0.2	0.5	1.00
103	2014	icf1	113	1076	1291	101.6	101.7	9.3	9.3	-0.1	0.5	1.00
104	2015	icf1	83	1598	1965	102.9	103.1	8.2	8.3	-0.2	0.5	1.00
105	2016	icf1	66	1522	1910	103.0	103.3	8.9	8.9	-0.3	0.7	1.00
106	2017	icf1	66	1618	1915	104.0	104.1	7.5	7.7	-0.1	0.8	0.99
107	2018	icf1	78	1292	1836	104.3	104.5	7.8	7.5	-0.1	1.2	0.99
108	2019	icf1	35	850	1197	100.5	100.4	8.4	8.1	0.1	2.2	0.97

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

Obs	BYR	name	no	mean_noff	std_noff	mean_ss	mean_oss	std_ss	std_oss	mean_dif	std_dif	corr_SS
109	2010	icf2	193	588	1833	96.6	96.8	9.5	9.4	-0.2	0.5	1.00
110	2011	icf2	155	364	774	97.6	97.8	8.9	8.9	-0.2	0.5	1.00
111	2012	icf2	171	537	948	98.4	98.7	10.1	10.1	-0.3	0.5	1.00
112	2013	icf2	151	557	1028	99.4	99.7	10.7	10.6	-0.3	0.6	1.00
113	2014	icf2	113	853	1030	101.5	101.8	9.9	9.9	-0.2	0.5	1.00
114	2015	icf2	83	1275	1588	103.1	103.2	9.6	9.6	-0.1	0.6	1.00
115	2016	icf2	66	1208	1523	103.2	103.5	9.8	9.7	-0.3	0.7	1.00
116	2017	icf2	66	1190	1402	104.3	104.5	9.1	9.0	-0.2	1.0	0.99
117	2018	icf2	53	689	935	104.4	104.6	8.8	8.2	-0.2	1.8	0.98
118	2010	icf3	193	381	1202	96.3	96.6	9.7	9.6	-0.3	0.6	1.00
119	2011	icf3	154	240	518	97.5	97.8	9.4	9.4	-0.3	0.6	1.00
120	2012	icf3	171	359	634	98.6	98.9	10.4	10.5	-0.3	0.6	1.00
121	2013	icf3	151	372	674	99.3	99.7	11.4	11.4	-0.4	0.6	1.00
122	2014	icf3	113	591	724	101.7	102.0	10.7	10.7	-0.3	0.6	1.00
123	2015	icf3	82	911	1161	103.3	103.3	10.0	10.1	0.0	0.8	1.00
124	2016	icf3	65	790	1001	103.8	104.1	10.4	10.3	-0.3	1.0	1.00
125	2017	icf3	54	410	501	104.8	104.8	9.8	9.6	-0.1	1.7	0.98
126	2010	icf	193	807	2493	96.6	96.8	9.5	9.4	-0.2	0.5	1.00
127	2011	icf	155	494	1025	97.8	98.0	9.0	9.0	-0.2	0.5	1.00
128	2012	icf	171	718	1262	98.6	98.8	10.1	10.1	-0.2	0.4	1.00
129	2013	icf	151	742	1349	99.5	99.8	10.6	10.6	-0.3	0.5	1.00
130	2014	icf	113	1115	1338	101.6	102.0	9.9	9.9	-0.4	0.6	1.00
131	2015	icf	83	1653	2028	103.3	103.3	9.3	9.3	0.0	0.6	1.00
132	2016	icf	66	1571	1970	103.4	103.7	9.6	9.6	-0.3	0.8	1.00
133	2017	icf	66	1662	1966	104.5	104.7	8.6	8.6	-0.2	1.1	0.99
134	2018	icf	78	1308	1861	104.8	104.8	8.3	7.9	-0.1	1.3	0.99
135	2019	icf	35	852	1200	100.8	100.6	8.5	8.4	0.2	2.0	0.97
136	2010	ifl0	193	865	2703	94.5	94.6	11.1	11.2	0.0	0.8	1.00
137	2011	ifl0	155	523	1109	94.5	94.6	10.0	10.0	-0.1	0.8	1.00
138	2012	ifl0	171	760	1348	96.5	96.6	10.5	10.5	-0.1	0.8	1.00
139	2013	ifl0	151	780	1431	97.4	97.5	11.2	11.2	-0.1	0.8	1.00
140	2014	ifl0	114	1182	1440	97.3	97.6	11.7	11.7	-0.3	0.9	1.00
141	2015	ifl0	83	1763	2175	99.7	100.3	10.9	11.0	-0.6	1.0	1.00
142	2016	ifl0	66	1697	2157	99.2	99.6	11.6	11.6	-0.4	0.9	1.00
143	2017	ifl0	66	1825	2177	99.0	99.5	13.0	13.1	-0.6	1.1	1.00
144	2018	ifl0	78	1690	2460	101.8	102.4	11.9	12.0	-0.6	1.4	0.99

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

Obs	BYR	name	no	mean_noff	std_noff	mean_ss	mean_oss	std_ss	std_oss	mean_dif	std_dif	corr_SS
145	2019	ifl0	56	1770	2580	103.5	104.8	13.9	13.5	-1.3	2.2	0.99
146	2020	ifl0	37	962	1356	101.4	102.0	10.2	10.0	-0.5	3.1	0.95
147	2010	ifl1	193	772	2387	92.6	93.0	10.8	10.7	-0.4	0.6	1.00
148	2011	ifl1	155	472	980	93.6	94.0	8.8	8.8	-0.4	0.6	1.00
149	2012	ifl1	171	687	1208	95.8	96.1	10.3	10.3	-0.4	0.6	1.00
150	2013	ifl1	151	710	1297	98.4	98.8	10.2	10.1	-0.4	0.6	1.00
151	2014	ifl1	113	1069	1284	99.0	99.4	9.8	9.9	-0.4	0.7	1.00
152	2015	ifl1	83	1591	1958	104.0	104.5	9.9	9.8	-0.5	0.7	1.00
153	2016	ifl1	66	1514	1900	103.3	103.8	8.3	8.4	-0.5	0.8	1.00
154	2017	ifl1	66	1610	1908	104.2	104.9	10.9	11.0	-0.7	1.0	1.00
155	2018	ifl1	78	1294	1838	106.9	107.3	9.0	8.7	-0.4	1.8	0.98
156	2019	ifl1	35	892	1235	107.5	107.4	10.3	10.1	0.2	3.2	0.95
157	2010	ifl2	193	585	1822	91.5	91.7	10.7	10.6	-0.2	0.6	1.00
158	2011	ifl2	155	361	768	93.1	93.4	9.6	9.5	-0.3	0.6	1.00
159	2012	ifl2	171	533	942	95.1	95.3	11.2	11.2	-0.1	0.7	1.00
160	2013	ifl2	151	554	1023	97.3	97.6	11.3	11.3	-0.3	0.7	1.00
161	2014	ifl2	113	848	1026	99.0	99.4	10.6	10.6	-0.4	0.8	1.00
162	2015	ifl2	83	1269	1581	103.8	104.3	11.0	11.0	-0.5	0.8	1.00
163	2016	ifl2	66	1202	1515	103.2	103.6	9.8	9.8	-0.4	1.0	1.00
164	2017	ifl2	66	1191	1406	104.8	105.6	11.6	11.8	-0.8	1.6	0.99
165	2018	ifl2	56	697	956	108.5	108.6	8.5	8.2	-0.1	2.2	0.96
166	2010	ifl3	193	379	1195	90.4	90.8	10.7	10.7	-0.4	0.7	1.00
167	2011	ifl3	154	239	514	92.5	93.0	9.8	9.7	-0.4	0.8	1.00
168	2012	ifl3	171	356	630	95.1	95.5	11.5	11.5	-0.4	0.8	1.00
169	2013	ifl3	151	371	673	96.6	97.1	11.9	11.8	-0.5	0.8	1.00
170	2014	ifl3	113	587	720	99.4	99.9	11.0	11.0	-0.5	0.9	1.00
171	2015	ifl3	82	907	1156	104.1	104.5	11.6	11.7	-0.4	0.9	1.00
172	2016	ifl3	65	790	1000	104.1	104.8	9.9	9.8	-0.7	1.3	0.99
173	2017	ifl3	56	424	518	105.7	106.3	12.5	12.4	-0.6	2.1	0.99
174	2010	ifl	193	978	3016	91.4	91.8	10.5	10.5	-0.3	0.6	1.00
175	2011	ifl	155	598	1243	93.1	93.4	9.1	9.1	-0.3	0.6	1.00
176	2012	ifl	171	866	1517	95.4	95.7	10.8	10.8	-0.3	0.6	1.00
177	2013	ifl	151	890	1609	97.4	97.7	10.9	10.8	-0.4	0.7	1.00
178	2014	ifl	114	1329	1601	99.2	99.6	10.1	10.2	-0.4	0.7	1.00
179	2015	ifl	83	1972	2408	104.0	104.3	10.6	10.6	-0.3	0.7	1.00
180	2016	ifl	66	1880	2364	103.5	104.1	9.1	9.0	-0.5	1.0	0.99

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

Obs	BYR	name	no	mean_noff	std_noff	mean_ss	mean_oss	std_ss	std_oss	mean_dif	std_dif	corr_SS
181	2017	ifl	66	2007	2362	104.8	105.5	11.3	11.3	-0.6	1.5	0.99
182	2018	ifl	78	1825	2621	107.5	107.7	8.7	8.4	-0.2	2.0	0.97
183	2019	ifl	56	1810	2638	107.2	107.6	10.0	9.8	-0.4	2.8	0.96
184	2020	ifl	37	962	1356	109.6	109.8	7.5	7.5	-0.2	1.8	0.97
185	2010	ais0	193	872	2720	95.6	95.8	10.9	10.9	-0.2	0.7	1.00
186	2011	ais0	155	527	1119	95.3	95.6	10.4	10.5	-0.3	0.7	1.00
187	2012	ais0	171	765	1359	96.7	96.9	10.4	10.4	-0.2	0.7	1.00
188	2013	ais0	151	787	1443	98.0	98.2	11.3	11.4	-0.2	0.8	1.00
189	2014	ais0	114	1191	1451	97.2	97.5	11.5	11.5	-0.3	0.7	1.00
190	2015	ais0	83	1777	2192	100.0	100.4	11.1	11.2	-0.4	0.8	1.00
191	2016	ais0	66	1707	2172	98.6	98.9	11.1	11.2	-0.3	0.8	1.00
192	2017	ais0	66	1835	2191	97.8	98.2	13.1	13.2	-0.3	1.1	1.00
193	2018	ais0	78	1702	2480	100.7	101.1	12.2	12.0	-0.4	1.4	0.99
194	2019	ais0	56	1791	2611	102.2	102.9	13.3	13.1	-0.7	2.1	0.99
195	2020	ais0	37	970	1369	99.8	100.6	10.9	10.1	-0.8	3.1	0.96
196	2010	ais1	193	760	2352	94.5	94.8	10.6	10.6	-0.3	0.6	1.00
197	2011	ais1	155	466	968	95.6	95.9	9.4	9.5	-0.3	0.7	1.00
198	2012	ais1	171	678	1194	96.8	97.1	10.0	10.1	-0.3	0.5	1.00
199	2013	ais1	151	701	1280	99.1	99.3	9.9	9.9	-0.2	0.6	1.00
200	2014	ais1	113	1059	1272	98.9	99.1	9.9	10.1	-0.2	0.7	1.00
201	2015	ais1	83	1572	1935	104.5	104.9	9.9	10.0	-0.4	0.6	1.00
202	2016	ais1	66	1498	1879	102.4	102.8	8.8	8.8	-0.3	0.6	1.00
203	2017	ais1	66	1593	1887	102.5	102.9	11.8	11.8	-0.4	1.0	1.00
204	2018	ais1	78	1270	1806	105.2	105.3	10.5	10.0	-0.1	1.5	0.99
205	2019	ais1	31	913	1208	106.8	107.0	10.6	10.5	-0.2	2.9	0.96
206	2010	ais2	193	576	1796	93.7	93.8	10.4	10.5	-0.1	0.7	1.00
207	2011	ais2	155	356	759	94.9	95.1	10.4	10.4	-0.2	0.6	1.00
208	2012	ais2	171	526	930	96.0	96.2	10.9	10.9	-0.2	0.6	1.00
209	2013	ais2	151	546	1009	97.8	98.1	11.6	11.7	-0.2	0.7	1.00
210	2014	ais2	113	839	1013	98.8	99.0	10.8	10.8	-0.2	0.7	1.00
211	2015	ais2	83	1254	1563	103.4	103.7	10.7	10.6	-0.2	0.6	1.00
212	2016	ais2	66	1189	1500	101.9	102.1	10.8	10.8	-0.2	0.8	1.00
213	2017	ais2	66	1168	1377	102.5	103.1	12.2	12.1	-0.6	1.5	0.99
214	2018	ais2	53	668	909	106.2	105.7	9.1	8.7	0.5	2.4	0.96
215	2010	ais3	193	371	1172	93.4	93.8	10.6	10.5	-0.4	0.7	1.00
216	2011	ais3	154	235	506	94.6	95.0	10.6	10.4	-0.4	0.8	1.00

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

Obs	BYR	name	no	mean_noff	std_noff	mean_ss	mean_oss	std_ss	std_oss	mean_dif	std_dif	corr_SS
217	2012	ais3	171	351	619	96.6	96.9	11.2	11.1	-0.3	0.8	1.00
218	2013	ais3	151	363	657	97.6	97.9	12.0	12.0	-0.3	0.8	1.00
219	2014	ais3	113	578	709	99.0	99.3	10.8	10.6	-0.3	0.9	1.00
220	2015	ais3	82	892	1138	103.4	103.7	11.2	11.1	-0.3	0.9	1.00
221	2016	ais3	65	771	977	102.8	103.0	11.3	11.1	-0.2	1.3	0.99
222	2017	ais3	52	404	487	102.8	103.0	13.3	12.3	-0.1	2.4	0.99
223	2010	ais	193	978	3017	93.9	94.2	10.2	10.2	-0.3	0.6	1.00
224	2011	ais	155	598	1244	95.1	95.3	9.8	9.8	-0.2	0.6	1.00
225	2012	ais	171	867	1518	96.6	96.8	10.4	10.4	-0.3	0.6	1.00
226	2013	ais	151	891	1612	98.1	98.4	10.9	10.8	-0.3	0.6	1.00
227	2014	ais	114	1330	1603	98.9	99.2	10.0	10.0	-0.3	0.7	1.00
228	2015	ais	83	1976	2412	103.8	104.0	10.2	10.2	-0.2	0.7	1.00
229	2016	ais	66	1883	2369	102.4	102.7	9.9	9.8	-0.3	0.9	1.00
230	2017	ais	66	2009	2366	102.4	102.9	11.9	11.6	-0.5	1.5	0.99
231	2018	ais	78	1832	2633	105.3	105.2	10.0	9.6	0.1	1.7	0.99
232	2019	ais	56	1826	2661	104.8	105.4	10.0	9.8	-0.6	2.3	0.97
233	2020	ais	37	970	1369	105.8	106.3	8.9	8.3	-0.5	1.6	0.99
234	2010	hst0	59	430	755	97.3	97.4	11.8	11.8	-0.1	0.7	1.00
235	2011	hst0	60	227	273	104.0	104.0	11.7	11.8	0.0	0.7	1.00
236	2012	hst0	69	288	346	99.9	100.1	11.7	11.8	-0.2	0.8	1.00
237	2013	hst0	80	260	390	99.4	99.4	11.7	11.9	-0.1	0.9	1.00
238	2014	hst0	72	238	260	102.8	102.9	11.9	12.0	-0.2	1.1	1.00
239	2015	hst0	72	305	399	98.0	98.2	11.0	11.1	-0.1	1.2	0.99
240	2016	hst0	60	289	433	102.4	102.5	9.8	10.1	-0.1	1.2	0.99
241	2017	hst0	58	325	439	101.7	101.6	11.5	11.6	0.1	1.4	0.99
242	2018	hst0	67	274	412	103.0	103.0	9.7	9.7	0.0	1.5	0.99
243	2019	hst0	44	286	391	99.1	99.9	12.4	12.5	-0.8	2.1	0.99
244	2020	hst0	13	205	219	101.9	100.6	8.1	8.2	1.3	5.6	0.76
245	2010	hst1	60	394	695	96.8	97.0	8.4	8.6	-0.2	0.6	1.00
246	2011	hst1	60	214	258	100.9	101.3	11.1	11.1	-0.4	0.9	1.00
247	2012	hst1	71	271	328	98.4	98.9	10.6	10.8	-0.5	0.9	1.00
248	2013	hst1	80	250	369	99.8	100.2	10.8	10.9	-0.3	0.7	1.00
249	2014	hst1	71	230	245	101.6	102.1	10.5	10.5	-0.4	1.0	1.00
250	2015	hst1	71	294	379	101.9	102.2	9.7	10.1	-0.3	0.9	1.00
251	2016	hst1	61	267	397	103.1	103.3	8.6	8.8	-0.2	1.0	0.99
252	2017	hst1	56	309	399	104.9	104.9	8.7	9.2	-0.1	1.5	0.99

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

Obs	BYR	name	no	mean_noff	std_noff	mean_ss	mean_oss	std_ss	std_oss	mean_dif	std_dif	corr_SS
253	2018	hst1	62	231	323	104.6	104.6	8.9	9.2	-0.1	2.2	0.97
254	2019	hst1	14	196	185	101.9	101.9	7.4	8.2	0.1	3.2	0.92
255	2010	hst2	58	295	523	96.4	96.4	10.5	10.3	-0.1	0.9	1.00
256	2011	hst2	60	157	192	100.4	100.6	10.9	10.8	-0.2	0.8	1.00
257	2012	hst2	68	211	247	98.1	98.4	11.7	11.6	-0.3	1.0	1.00
258	2013	hst2	79	190	283	100.8	100.9	12.0	11.8	-0.1	1.0	1.00
259	2014	hst2	71	176	189	101.4	101.7	11.3	11.0	-0.3	1.1	1.00
260	2015	hst2	67	237	298	101.8	102.1	10.1	10.5	-0.3	1.2	0.99
261	2016	hst2	58	208	299	103.0	103.2	10.6	10.9	-0.2	1.2	0.99
262	2017	hst2	52	208	245	104.6	105.2	9.7	9.8	-0.6	2.1	0.98
263	2018	hst2	24	124	159	105.3	105.3	11.3	10.1	0.0	3.4	0.96
264	2010	hst3	55	193	343	96.8	97.1	10.7	10.3	-0.4	0.9	1.00
265	2011	hst3	52	110	126	102.2	102.5	12.2	11.8	-0.3	1.0	1.00
266	2012	hst3	61	149	166	100.1	100.6	11.8	11.5	-0.5	1.1	1.00
267	2013	hst3	74	129	174	101.9	102.5	11.1	11.0	-0.6	1.2	0.99
268	2014	hst3	64	125	128	101.5	102.0	11.3	11.0	-0.5	1.2	0.99
269	2015	hst3	60	170	206	101.6	101.6	11.3	11.3	0.0	1.6	0.99
270	2016	hst3	44	140	178	102.7	103.3	9.4	9.3	-0.7	2.0	0.98
271	2017	hst3	14	102	73	105.3	104.6	7.2	7.2	0.6	3.8	0.86
272	2010	hst	60	530	924	96.7	97.0	9.7	9.7	-0.4	0.7	1.00
273	2011	hst	60	289	341	101.2	101.5	11.2	11.0	-0.4	0.8	1.00
274	2012	hst	71	358	429	98.8	99.2	11.6	11.6	-0.4	0.9	1.00
275	2013	hst	80	329	482	100.6	101.0	11.3	11.3	-0.4	0.8	1.00
276	2014	hst	72	298	321	101.9	102.4	11.2	10.9	-0.5	0.9	1.00
277	2015	hst	73	371	485	101.6	101.7	10.2	10.3	-0.1	1.2	0.99
278	2016	hst	62	339	508	103.1	103.6	9.6	9.7	-0.5	1.1	0.99
279	2017	hst	59	377	504	104.5	104.6	9.0	9.2	-0.1	2.1	0.97
280	2018	hst	68	309	460	104.7	104.6	9.6	9.4	0.1	1.9	0.98
281	2019	hst	44	295	405	102.1	102.5	7.7	7.8	-0.4	1.9	0.97
282	2020	hst	13	205	219	105.8	105.3	8.9	8.8	0.5	2.8	0.95
283	2010	fert	193	807	2493	91.8	92.1	10.7	10.6	-0.3	0.6	1.00
284	2011	fert	155	494	1025	93.3	93.6	9.2	9.2	-0.3	0.6	1.00
285	2012	fert	171	718	1262	95.5	95.8	10.8	10.9	-0.3	0.6	1.00
286	2013	fert	151	742	1349	97.4	97.8	11.0	11.0	-0.4	0.6	1.00
287	2014	fert	113	1115	1338	99.1	99.5	10.3	10.3	-0.4	0.6	1.00
288	2015	fert	83	1653	2028	103.8	104.2	10.6	10.5	-0.5	0.6	1.00

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

Obs	BYR	name	no	mean_noff	std_noff	mean_ss	mean_oss	std_ss	std_oss	mean_dif	std_dif	corr_SS
289	2016	fert	66	1571	1970	103.3	103.8	9.0	9.1	-0.5	0.8	1.00
290	2017	fert	66	1662	1966	104.2	104.9	11.6	11.6	-0.7	1.5	0.99
291	2018	fert	78	1308	1861	107.0	107.2	9.1	8.9	-0.2	1.8	0.98
292	2019	fert	35	852	1200	107.0	107.0	10.4	10.2	0.0	2.7	0.97

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

Obs	diff	d_cr	d_nrr	d_icf	d_ifl	d_ais	d_hst	d_fert
1	-7	.	2	.	1	.	1	.
2	-6	.	2	.	2	1	1	2
3	-5	3	3	1	4	2	.	1
4	-4	7	4	1	7	8	5	5
5	-3	22	21	5	19	14	15	7
6	-2	76	73	22	60	49	67	53
7	-1	541	397	295	387	358	198	397
8	0	436	500	680	544	568	244	530
9	1	43	118	86	107	135	79	91
10	2	18	29	15	25	23	33	15
11	3	5	11	4	8	8	11	5
12	4	6	3	2	2	4	5	2
13	5	.	6	.	2	.	1	1
14	6	.	1	.	.	.	1	2
15	7	.	.	.	2	.	1	.

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

Obs	diff	p_cr	p_nrr	p_icf	p_ifl	p_ais	p_hst	p_fert
1	-7	.	0	.	0	.	0	.
2	-6	.	0	.	0	0	0	0
3	-5	0	0	0	0	0	.	0
4	-4	1	0	0	1	1	1	0
5	-3	2	2	0	2	1	2	1
6	-2	7	6	2	5	4	10	5
7	-1	47	34	27	33	31	30	36
8	0	38	43	61	46	49	37	48
9	1	4	10	8	9	12	12	8
10	2	2	2	1	2	2	5	1
11	3	0	1	0	1	1	2	0
12	4	1	0	0	0	0	1	0
13	5	.	1	.	0	.	0	0
14	6	.	0	.	.	.	0	0
15	7	.	.	.	0	.	0	.

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

Obs	BYR	name	no	mean_noff	std_noff	mean_ss	mean_oss	std_ss	std_oss	mean_dif	std_dif	corr_SS
1	2019	cr0	12	.	.	106.1	106.7	5.1	5.0	-0.6	0.5	0.99
2	2020	cr0	20	.	.	104.4	104.8	11.1	11.1	-0.4	0.8	1.00
3	2021	cr0	55	.	.	105.2	106.2	10.0	9.9	-1.0	1.2	0.99
4	2022	cr0	62	.	.	108.5	109.5	8.7	9.3	-1.0	1.8	0.98
5	2023	cr0	35	.	.	108.9	109.9	8.4	8.5	-1.0	1.3	0.99
6	2019	cr1	18	.	.	109.4	109.6	9.0	8.6	-0.1	1.4	0.99
7	2020	cr1	71	.	.	109.0	109.2	7.4	7.2	-0.2	1.9	0.97
8	2021	cr1	58	.	.	108.2	108.8	8.3	7.9	-0.6	1.6	0.98
9	2022	cr1	62	.	.	111.7	112.1	7.6	7.7	-0.4	1.3	0.99
10	2023	cr1	35	.	.	111.2	111.9	8.3	8.1	-0.7	1.3	0.99
11	2019	cr2	61	.	.	109.2	109.9	8.9	8.6	-0.7	1.8	0.98
12	2020	cr2	72	.	.	108.9	109.1	7.1	6.9	-0.3	1.7	0.97
13	2021	cr2	58	.	.	108.5	109.1	7.9	7.6	-0.7	1.6	0.98
14	2022	cr2	62	.	.	111.7	111.8	7.7	7.8	-0.1	1.2	0.99
15	2023	cr2	35	.	.	111.2	111.8	8.4	8.3	-0.6	1.3	0.99
16	2019	cr3	69	.	.	108.8	109.3	9.1	8.9	-0.6	2.0	0.98
17	2020	cr3	72	.	.	108.9	109.0	7.1	6.8	-0.2	1.6	0.97
18	2021	cr3	58	.	.	108.7	109.1	7.8	7.5	-0.4	1.6	0.98
19	2022	cr3	62	.	.	111.9	112.0	7.8	7.8	-0.1	1.3	0.99
20	2023	cr3	35	.	.	111.2	111.8	8.7	8.4	-0.6	1.2	0.99
21	2019	cr	11	.	.	109.3	109.6	7.3	7.7	-0.4	0.9	0.99
22	2020	cr	20	.	.	107.8	108.4	6.9	6.4	-0.6	1.1	0.99
23	2021	cr	55	.	.	108.8	109.3	8.2	7.8	-0.6	1.6	0.98
24	2022	cr	62	.	.	111.9	112.2	7.8	7.9	-0.3	1.3	0.99
25	2023	cr	35	.	.	111.4	112.0	8.6	8.3	-0.6	1.3	0.99
26	2019	nrr0	12	.	.	100.8	101.6	5.0	4.4	-0.8	1.7	0.94
27	2020	nrr0	14	.	.	98.9	99.7	11.5	11.7	-0.8	0.7	1.00
28	2021	nrr0	48	.	.	100.2	100.7	9.5	9.4	-0.5	1.3	0.99
29	2022	nrr0	62	.	.	101.8	102.6	8.2	8.8	-0.9	2.1	0.97
30	2023	nrr0	35	.	.	102.5	103.1	7.4	7.3	-0.6	1.7	0.97
31	2019	nrr1	11	.	.	106.2	106.5	6.4	6.0	-0.4	1.1	0.99
32	2020	nrr1	57	.	.	104.3	104.8	7.7	7.6	-0.5	1.6	0.98
33	2021	nrr1	58	.	.	105.0	105.6	7.8	8.0	-0.6	1.8	0.97
34	2022	nrr1	62	.	.	107.9	108.1	7.5	7.8	-0.2	1.5	0.98
35	2023	nrr1	35	.	.	107.4	107.3	7.7	7.4	0.1	1.7	0.98
36	2019	nrr2	50	.	.	105.4	106.2	8.9	8.5	-0.8	2.2	0.97

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

Obs	BYR	name	no	mean_noff	std_noff	mean_ss	mean_oss	std_ss	std_oss	mean_dif	std_dif	corr_SS
37	2020	nrr2	72	.	.	103.8	104.1	7.9	7.9	-0.3	2.1	0.97
38	2021	nrr2	58	.	.	105.1	105.7	7.3	7.4	-0.6	2.0	0.96
39	2022	nrr2	62	.	.	108.2	108.1	8.5	8.5	0.1	1.8	0.98
40	2023	nrr2	35	.	.	107.9	107.5	7.8	7.6	0.4	1.7	0.98
41	2019	nrr3	69	.	.	105.4	106.0	9.8	9.4	-0.6	2.5	0.97
42	2020	nrr3	72	.	.	104.2	104.2	8.4	8.3	0.0	2.0	0.97
43	2021	nrr3	58	.	.	105.7	106.4	7.2	7.1	-0.8	1.8	0.97
44	2022	nrr3	62	.	.	108.7	108.5	9.0	9.0	0.2	1.7	0.98
45	2023	nrr3	35	.	.	107.7	107.3	9.4	9.0	0.4	1.8	0.98
46	2019	nrr	11	.	.	106.1	106.5	7.2	6.7	-0.4	1.4	0.98
47	2020	nrr	14	.	.	104.4	104.4	7.2	6.8	0.0	1.9	0.96
48	2021	nrr	48	.	.	106.0	106.7	7.1	7.3	-0.7	1.6	0.98
49	2022	nrr	62	.	.	108.4	108.2	8.2	8.3	0.1	1.6	0.98
50	2023	nrr	35	.	.	107.7	107.3	8.2	7.9	0.4	1.6	0.98
51	2019	icf1	11	.	.	105.5	105.6	10.0	10.1	-0.2	0.6	1.00
52	2020	icf1	59	.	.	105.6	105.6	6.9	6.7	0.0	1.0	0.99
53	2021	icf1	58	.	.	103.4	103.4	7.1	7.0	0.0	1.1	0.99
54	2022	icf1	62	.	.	104.0	103.9	7.3	7.1	0.1	1.2	0.99
55	2023	icf1	35	.	.	104.3	104.9	6.5	6.4	-0.6	1.0	0.99
56	2019	icf2	55	.	.	103.1	103.5	9.4	9.6	-0.4	1.9	0.98
57	2020	icf2	72	.	.	106.6	106.6	7.7	7.5	0.0	1.2	0.99
58	2021	icf2	58	.	.	104.2	104.0	7.2	7.1	0.2	1.0	0.99
59	2022	icf2	62	.	.	105.2	105.2	7.2	6.9	0.0	1.0	0.99
60	2023	icf2	35	.	.	105.4	105.9	6.7	6.6	-0.5	1.0	0.99
61	2019	icf3	69	.	.	103.3	103.3	9.1	9.3	0.0	1.7	0.98
62	2020	icf3	72	.	.	106.8	106.7	7.6	7.5	0.2	1.0	0.99
63	2021	icf3	58	.	.	104.4	104.2	7.5	7.5	0.2	1.1	0.99
64	2022	icf3	62	.	.	105.5	105.3	7.4	7.1	0.2	1.1	0.99
65	2023	icf3	35	.	.	106.1	106.3	7.1	7.0	-0.1	0.9	0.99
66	2019	icf	11	.	.	106.5	106.7	10.6	10.5	-0.3	0.6	1.00
67	2020	icf	59	.	.	106.5	106.6	6.9	6.8	-0.1	0.9	0.99
68	2021	icf	58	.	.	104.1	104.0	7.3	7.2	0.1	1.0	0.99
69	2022	icf	62	.	.	105.0	104.9	7.3	6.9	0.1	1.0	0.99
70	2023	icf	35	.	.	105.5	105.9	6.8	6.6	-0.4	0.8	0.99
71	2019	ifl0	12	.	.	101.5	102.3	5.2	5.1	-0.8	1.0	0.98
72	2020	ifl0	14	.	.	101.6	102.6	10.9	11.5	-1.1	1.3	1.00

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

Obs	BYR	name	no	mean_noff	std_noff	mean_ss	mean_oss	std_ss	std_oss	mean_dif	std_dif	corr_SS
73	2021	ifl0	48	.	.	101.8	102.4	9.8	9.7	-0.6	1.4	0.99
74	2022	ifl0	62	.	.	102.7	103.7	8.1	8.5	-1.0	2.0	0.97
75	2023	ifl0	35	.	.	103.5	104.6	7.4	7.5	-1.1	1.6	0.98
76	2019	ifl1	11	.	.	109.0	109.9	9.2	8.6	-0.9	1.1	0.99
77	2020	ifl1	57	.	.	108.3	108.8	7.2	6.9	-0.6	1.5	0.98
78	2021	ifl1	58	.	.	107.3	107.6	8.5	8.6	-0.3	1.6	0.98
79	2022	ifl1	62	.	.	110.6	110.7	6.9	7.0	-0.1	1.5	0.98
80	2023	ifl1	35	.	.	110.7	110.8	7.9	7.6	-0.1	1.5	0.98
81	2019	ifl2	50	.	.	108.3	109.3	10.2	9.9	-1.0	2.4	0.97
82	2020	ifl2	72	.	.	109.1	109.4	7.5	7.2	-0.3	1.8	0.97
83	2021	ifl2	58	.	.	108.0	108.7	8.5	8.7	-0.7	1.6	0.98
84	2022	ifl2	62	.	.	111.4	111.4	7.8	7.7	0.0	1.4	0.98
85	2023	ifl2	35	.	.	111.7	111.7	8.5	8.1	0.0	1.5	0.98
86	2019	ifl3	69	.	.	107.8	108.2	10.3	9.9	-0.4	2.6	0.97
87	2020	ifl3	72	.	.	109.7	109.7	7.6	7.3	0.0	1.8	0.97
88	2021	ifl3	58	.	.	109.0	109.5	8.0	8.2	-0.5	1.6	0.98
89	2022	ifl3	62	.	.	112.2	112.1	7.8	7.5	0.1	1.3	0.99
90	2023	ifl3	35	.	.	112.5	112.6	9.1	8.9	-0.1	1.4	0.99
91	2019	ifl	11	.	.	109.4	110.4	9.4	9.0	-1.0	1.1	0.99
92	2020	ifl	14	.	.	109.5	109.5	7.8	7.5	0.0	1.7	0.98
93	2021	ifl	48	.	.	108.4	108.8	8.3	8.6	-0.4	1.5	0.98
94	2022	ifl	62	.	.	111.4	111.4	7.4	7.2	0.0	1.3	0.98
95	2023	ifl	35	.	.	111.6	111.7	8.4	8.2	-0.1	1.3	0.99
96	2019	ais0	12	.	.	102.5	103.0	5.3	5.3	-0.5	1.1	0.98
97	2020	ais0	14	.	.	98.1	98.5	11.8	12.0	-0.4	0.8	1.00
98	2021	ais0	48	.	.	99.6	99.8	9.9	9.8	-0.2	1.2	0.99
99	2022	ais0	62	.	.	100.6	101.3	8.2	8.6	-0.7	2.3	0.96
100	2023	ais0	35	.	.	101.5	101.9	8.3	8.2	-0.4	1.6	0.98
101	2019	ais1	11	.	.	107.5	107.8	7.7	7.4	-0.4	0.8	0.99
102	2020	ais1	59	.	.	105.7	106.2	7.5	7.2	-0.4	1.6	0.98
103	2021	ais1	58	.	.	104.3	104.5	8.4	8.5	-0.2	1.4	0.99
104	2022	ais1	62	.	.	107.5	107.9	7.6	7.7	-0.4	1.5	0.98
105	2023	ais1	35	.	.	106.7	106.9	8.2	8.1	-0.2	1.3	0.99
106	2019	ais2	55	.	.	104.8	105.7	9.6	9.2	-0.9	2.1	0.98
107	2020	ais2	72	.	.	105.3	105.8	8.6	8.0	-0.5	1.7	0.98
108	2021	ais2	58	.	.	104.5	104.9	8.2	8.5	-0.4	1.2	0.99

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

Obs	BYR	name	no	mean_noff	std_noff	mean_ss	mean_oss	std_ss	std_oss	mean_dif	std_dif	corr_SS
109	2022	ais2	62	.	.	107.5	107.8	8.9	8.8	-0.3	1.4	0.99
110	2023	ais2	35	.	.	107.6	107.5	8.9	8.8	0.1	1.4	0.99
111	2019	ais3	69	.	.	104.9	105.6	9.8	9.5	-0.7	2.2	0.98
112	2020	ais3	72	.	.	104.4	104.7	8.5	7.9	-0.3	1.7	0.98
113	2021	ais3	58	.	.	104.1	104.6	7.7	8.0	-0.5	1.3	0.99
114	2022	ais3	62	.	.	107.2	107.3	9.4	9.2	-0.2	1.5	0.99
115	2023	ais3	35	.	.	106.9	106.8	9.9	9.6	0.1	1.4	0.99
116	2019	ais	11	.	.	107.0	107.8	8.0	7.7	-0.8	1.0	0.99
117	2020	ais	14	.	.	105.3	105.1	6.9	6.7	0.2	1.3	0.98
118	2021	ais	48	.	.	104.7	105.1	8.0	8.3	-0.4	1.2	0.99
119	2022	ais	62	.	.	107.3	107.5	8.4	8.4	-0.3	1.3	0.99
120	2023	ais	35	.	.	106.9	106.9	8.9	8.7	0.0	1.3	0.99
121	2019	hst0	15	.	.	97.8	98.1	8.7	7.9	-0.3	1.3	0.99
122	2020	hst0	20	.	.	103.1	102.3	8.9	9.3	0.8	2.3	0.97
123	2021	hst0	51	.	.	99.0	99.2	9.7	10.0	-0.2	1.6	0.99
124	2022	hst0	62	.	.	100.3	100.2	9.2	8.9	0.0	2.8	0.95
125	2023	hst0	35	.	.	99.0	99.9	7.3	7.7	-0.9	1.5	0.98
126	2019	hst1	26	.	.	101.4	101.8	8.2	8.6	-0.4	1.7	0.98
127	2020	hst1	70	.	.	104.6	104.2	7.8	8.0	0.4	1.9	0.97
128	2021	hst1	58	.	.	102.3	102.0	7.3	7.3	0.3	2.0	0.96
129	2022	hst1	62	.	.	104.3	104.1	7.7	7.7	0.2	1.8	0.97
130	2023	hst1	35	.	.	104.1	104.5	7.2	7.1	-0.5	1.4	0.98
131	2019	hst2	64	.	.	102.3	102.9	10.1	10.0	-0.6	1.9	0.98
132	2020	hst2	72	.	.	104.9	104.9	8.3	8.1	0.0	2.1	0.97
133	2021	hst2	58	.	.	103.0	103.1	8.7	8.6	-0.1	1.6	0.98
134	2022	hst2	62	.	.	104.4	104.5	7.6	7.2	-0.2	1.8	0.97
135	2023	hst2	35	.	.	105.1	105.3	8.1	7.9	-0.1	1.3	0.99
136	2019	hst3	69	.	.	102.5	102.6	8.5	8.5	-0.1	1.8	0.98
137	2020	hst3	72	.	.	104.9	104.9	7.6	7.6	-0.1	2.0	0.96
138	2021	hst3	58	.	.	103.2	103.0	8.1	8.0	0.2	1.5	0.98
139	2022	hst3	62	.	.	105.0	104.9	7.6	7.2	0.1	1.9	0.97
140	2023	hst3	35	.	.	104.5	104.5	7.1	6.9	0.0	1.1	0.99
141	2019	hst	14	.	.	100.7	100.8	11.0	10.7	-0.1	1.9	0.99
142	2020	hst	20	.	.	106.0	105.5	7.7	7.5	0.5	1.7	0.98
143	2021	hst	51	.	.	103.0	102.9	8.2	8.2	0.1	1.5	0.98
144	2022	hst	62	.	.	104.8	104.8	7.5	7.2	0.0	1.8	0.97

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

Obs	BYR	name	no	mean_noff	std_noff	mean_ss	mean_oss	std_ss	std_oss	mean_dif	std_dif	corr_SS
145	2023	hst	35	.	.	104.8	105.0	7.3	7.1	-0.1	1.1	0.99
146	2019	fert	11	.	.	108.9	109.8	9.1	8.8	-0.9	1.0	0.99
147	2020	fert	59	.	.	107.9	108.4	7.1	6.7	-0.5	1.5	0.98
148	2021	fert	58	.	.	107.1	107.6	8.3	8.4	-0.5	1.3	0.99
149	2022	fert	62	.	.	110.3	110.4	7.5	7.4	-0.2	1.3	0.99
150	2023	fert	35	.	.	110.4	110.8	8.4	8.2	-0.4	1.3	0.99

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

Obs	diff	d_cr	d_nrr	d_icf	d_ifl	d_ais	d_hst	d_fert
1	-5	.	.	.	.	1	.	1
2	-4	4	1	.	1	.	2	3
3	-3	8	15	1	7	4	8	8
4	-2	18	20	11	22	21	15	29
5	-1	62	30	56	40	44	42	69
6	0	53	43	99	48	55	45	63
7	1	29	31	48	40	32	39	36
8	2	6	24	9	8	12	20	13
9	3	3	5	2	3	2	11	4
10	4	1	2	.	2	.	.	.
11	5	.	.	.	.	.	1	.

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

Obs	diff	p_cr	p_nrr	p_icf	p_ifl	p_ais	p_hst	p_fert
1	-5	.	.	.	.	1	.	0
2	-4	2	1	.	1	.	1	1
3	-3	4	9	0	4	2	4	4
4	-2	10	12	5	13	12	8	13
5	-1	34	18	25	23	26	23	31
6	0	29	25	44	28	32	25	28
7	1	16	18	21	23	19	21	16
8	2	3	14	4	5	7	11	6
9	3	2	3	1	2	1	6	2
10	4	1	1	.	1	.	.	.
11	5	.	.	.	.	.	1	.

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	cr0	92871	92.5	93.5	7.0	7.2	-0.9	1.2	0.98
2	2011	cr0	90413	93.3	94.4	6.7	6.7	-1.1	1.4	0.98
3	2012	cr0	83190	94.4	95.7	6.8	6.8	-1.3	1.5	0.98
4	2013	cr0	80428	94.4	95.5	6.6	6.5	-1.1	1.6	0.97
5	2014	cr0	74037	94.8	95.7	6.7	6.6	-0.9	1.7	0.97
6	2015	cr0	64067	95.4	96.2	7.1	7.0	-0.8	1.7	0.97
7	2016	cr0	54918	96.2	96.8	7.3	7.2	-0.6	1.8	0.97
8	2017	cr0	47379	97.0	97.3	7.2	7.1	-0.3	1.8	0.97
9	2018	cr0	41421	97.6	97.8	6.7	6.5	-0.2	1.9	0.96
10	2019	cr0	36077	97.9	97.8	8.2	8.2	0.2	1.9	0.97
11	2020	cr0	34240	100.4	100.5	8.6	8.5	-0.1	1.9	0.97
12	2021	cr0	30666	99.3	99.0	7.3	7.4	0.3	2.1	0.96
13	2022	cr0	10791	100.4	99.8	8.2	8.2	0.6	2.2	0.96
14	2010	cr1	78782	89.5	91.2	6.1	6.3	-1.7	1.3	0.98
15	2011	cr1	77066	90.8	92.7	6.2	6.4	-1.9	1.4	0.97
16	2012	cr1	70275	92.3	94.3	6.5	6.6	-2.0	1.5	0.97
17	2013	cr1	66052	92.1	93.9	6.0	6.0	-1.8	1.7	0.96
18	2014	cr1	60024	93.0	94.7	6.0	6.0	-1.6	1.8	0.96
19	2015	cr1	53034	93.5	94.8	6.4	6.2	-1.3	1.8	0.96
20	2016	cr1	45816	94.8	95.7	6.7	6.6	-0.9	1.9	0.96
21	2017	cr1	39594	94.9	95.4	6.7	6.5	-0.6	1.9	0.96
22	2018	cr1	34687	96.7	97.1	6.9	6.8	-0.3	1.9	0.96
23	2019	cr1	29840	96.9	97.0	7.7	7.7	-0.1	1.9	0.97
24	2020	cr1	27703	100.7	100.7	8.4	8.3	0.0	1.9	0.97
25	2021	cr1	9037	100.8	100.4	7.3	7.3	0.3	2.2	0.96
26	2022	cr1	2	.	.	.	.	.	.	1.00
27	2010	cr2	57227	90.8	92.8	5.8	5.8	-2.0	1.4	0.97
28	2011	cr2	55714	92.2	94.3	6.1	6.1	-2.0	1.5	0.97
29	2012	cr2	50243	93.5	95.6	6.2	6.1	-2.1	1.6	0.97
30	2013	cr2	47063	93.0	94.9	6.0	5.9	-1.9	1.7	0.96
31	2014	cr2	43877	93.6	95.4	5.9	5.8	-1.7	1.9	0.95
32	2015	cr2	38661	94.3	95.7	6.2	6.0	-1.4	1.9	0.95
33	2016	cr2	34035	95.5	96.5	6.3	6.2	-1.0	1.9	0.95
34	2017	cr2	29128	95.4	96.0	6.5	6.3	-0.6	1.9	0.96
35	2018	cr2	25375	97.2	97.6	6.5	6.4	-0.4	1.9	0.96
36	2019	cr2	20714	97.6	97.8	7.2	7.1	-0.2	1.9	0.97
37	2020	cr2	7124	101.1	101.0	7.6	7.6	0.1	2.0	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
38	2021	cr2	2	.	.	.	.	.	.	1.00
39	2010	cr3	34313	91.6	93.4	6.0	5.9	-1.8	1.5	0.97
40	2011	cr3	33930	93.1	95.0	6.4	6.2	-1.9	1.6	0.97
41	2012	cr3	31008	94.3	96.2	6.4	6.2	-1.9	1.7	0.96
42	2013	cr3	29973	93.7	95.4	6.3	6.1	-1.8	1.9	0.96
43	2014	cr3	27921	94.3	95.9	6.2	6.0	-1.6	2.0	0.95
44	2015	cr3	24981	95.2	96.5	6.3	6.1	-1.3	2.0	0.95
45	2016	cr3	21984	96.3	97.2	6.4	6.2	-0.9	2.0	0.95
46	2017	cr3	18315	96.2	96.8	6.5	6.3	-0.5	2.0	0.95
47	2018	cr3	14662	97.9	98.3	6.3	6.2	-0.4	2.0	0.95
48	2019	cr3	3958	98.5	98.7	6.5	6.3	-0.2	2.1	0.95
49	2020	cr3	7	.	.	.	.	.	.	0.98
50	2010	cr	101952	90.0	91.9	6.0	6.0	-1.9	1.3	0.98
51	2011	cr	98707	91.3	93.4	6.3	6.2	-2.0	1.4	0.98
52	2012	cr	90856	92.7	94.8	6.4	6.3	-2.1	1.5	0.97
53	2013	cr	87609	92.1	94.1	6.0	6.0	-2.0	1.6	0.97
54	2014	cr	80589	92.9	94.7	6.0	5.9	-1.8	1.7	0.96
55	2015	cr	70067	93.7	95.2	6.2	6.1	-1.5	1.7	0.96
56	2016	cr	60099	95.0	96.1	6.4	6.3	-1.1	1.8	0.96
57	2017	cr	51944	94.8	95.5	6.5	6.4	-0.7	1.8	0.96
58	2018	cr	45402	96.6	97.0	6.6	6.6	-0.4	1.8	0.96
59	2019	cr	39505	96.9	97.1	7.3	7.3	-0.2	1.8	0.97
60	2020	cr	37005	100.6	100.5	7.7	7.7	0.0	1.9	0.97
61	2021	cr	31537	100.2	99.6	6.3	6.5	0.6	2.3	0.93
62	2022	cr	10793	101.5	100.2	6.4	6.4	1.3	2.7	0.91
63	2010	nrr0	87004	96.9	97.8	6.0	6.1	-0.9	1.4	0.97
64	2011	nrr0	84873	97.0	98.0	5.8	5.8	-1.0	1.5	0.96
65	2012	nrr0	78164	98.1	99.2	6.0	5.9	-1.1	1.7	0.96
66	2013	nrr0	75660	98.3	99.1	6.3	6.1	-0.9	1.8	0.96
67	2014	nrr0	69764	98.3	99.0	6.4	6.3	-0.7	2.0	0.95
68	2015	nrr0	60274	98.3	98.9	6.7	6.7	-0.6	2.0	0.96
69	2016	nrr0	51770	98.6	99.0	6.8	6.8	-0.5	2.0	0.96
70	2017	nrr0	44309	99.3	99.7	7.2	7.1	-0.3	2.0	0.96
71	2018	nrr0	38844	99.0	99.2	6.5	6.4	-0.1	2.1	0.95
72	2019	nrr0	33811	98.9	98.7	7.6	7.7	0.2	2.1	0.96
73	2020	nrr0	31937	100.3	100.3	7.9	7.8	-0.1	2.1	0.96
74	2021	nrr0	29093	98.7	98.5	6.8	6.9	0.2	2.2	0.95

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	2022	nrr0	17236	99.0	98.4	7.1	7.2	0.6	2.2	0.95
76	2023	nrr0	12	.	.	.	.	.	.	0.80
77	2010	nrr1	75616	94.5	96.0	6.4	6.5	-1.5	1.4	0.98
78	2011	nrr1	74138	94.9	96.4	6.4	6.4	-1.6	1.5	0.97
79	2012	nrr1	67781	96.1	97.7	6.7	6.6	-1.6	1.6	0.97
80	2013	nrr1	63609	96.3	97.7	6.3	6.2	-1.5	1.8	0.96
81	2014	nrr1	57902	96.8	98.0	6.4	6.3	-1.2	1.9	0.96
82	2015	nrr1	51202	96.8	97.8	6.4	6.3	-1.0	1.9	0.95
83	2016	nrr1	44193	97.3	98.0	6.9	6.7	-0.8	2.0	0.96
84	2017	nrr1	38202	97.5	98.1	7.0	6.7	-0.6	2.0	0.96
85	2018	nrr1	33467	98.4	98.7	6.7	6.5	-0.3	2.0	0.95
86	2019	nrr1	28888	98.0	98.1	7.5	7.5	0.0	2.0	0.97
87	2020	nrr1	27288	100.5	100.5	7.4	7.4	0.0	2.0	0.96
88	2021	nrr1	13602	100.0	99.7	6.8	6.8	0.3	2.2	0.95
89	2022	nrr1	36	99.5	99.3	5.7	6.3	0.3	2.3	0.93
90	2010	nrr2	55158	95.6	96.9	6.3	6.3	-1.2	1.5	0.97
91	2011	nrr2	53720	96.1	97.4	6.6	6.5	-1.3	1.6	0.97
92	2012	nrr2	48540	97.0	98.3	6.8	6.6	-1.4	1.8	0.96
93	2013	nrr2	45450	96.4	97.7	6.3	6.2	-1.3	1.9	0.95
94	2014	nrr2	42396	96.7	97.9	6.6	6.5	-1.1	2.0	0.95
95	2015	nrr2	37331	96.8	97.9	6.4	6.3	-1.1	2.1	0.94
96	2016	nrr2	32926	97.3	98.0	7.2	7.1	-0.7	2.1	0.96
97	2017	nrr2	28128	97.4	97.9	7.4	7.3	-0.5	2.1	0.96
98	2018	nrr2	24529	97.9	98.3	7.2	7.2	-0.4	2.1	0.96
99	2019	nrr2	20763	98.2	98.4	7.9	7.9	-0.2	2.1	0.96
100	2020	nrr2	11024	100.8	100.7	7.7	7.7	0.1	2.3	0.96
101	2021	nrr2	55	103.5	102.9	6.5	6.9	0.6	2.5	0.93
102	2010	nrr3	33000	96.5	97.6	6.8	6.7	-1.1	1.6	0.97
103	2011	nrr3	32637	97.0	98.3	7.1	6.8	-1.3	1.7	0.97
104	2012	nrr3	29866	97.9	99.3	7.4	7.1	-1.4	1.9	0.97
105	2013	nrr3	28971	97.1	98.3	6.7	6.4	-1.2	2.0	0.95
106	2014	nrr3	26953	97.4	98.6	7.3	7.1	-1.1	2.1	0.96
107	2015	nrr3	24079	98.0	98.9	6.7	6.4	-1.0	2.2	0.95
108	2016	nrr3	21155	98.2	99.0	7.2	6.9	-0.8	2.2	0.95
109	2017	nrr3	17750	98.3	98.8	7.7	7.4	-0.5	2.2	0.96
110	2018	nrr3	14906	98.4	99.0	7.4	7.2	-0.5	2.2	0.96
111	2019	nrr3	6517	99.1	99.2	7.6	7.4	-0.1	2.3	0.95

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	2020	nrr3	65	101.9	101.9	7.1	7.2	0.0	2.1	0.96
113	2010	nrr	99755	95.4	96.8	6.3	6.2	-1.3	1.3	0.98
114	2011	nrr	96639	95.8	97.2	6.5	6.4	-1.4	1.4	0.98
115	2012	nrr	88965	96.8	98.3	6.8	6.6	-1.5	1.6	0.97
116	2013	nrr	85842	96.3	97.7	6.1	6.0	-1.4	1.7	0.96
117	2014	nrr	78993	96.7	97.9	6.5	6.4	-1.2	1.7	0.96
118	2015	nrr	68770	96.9	98.0	6.2	6.1	-1.1	1.8	0.96
119	2016	nrr	58987	97.4	98.2	6.9	6.6	-0.8	1.8	0.96
120	2017	nrr	50910	97.4	97.9	7.2	6.9	-0.6	1.8	0.97
121	2018	nrr	44579	97.9	98.3	6.8	6.7	-0.5	1.8	0.96
122	2019	nrr	38737	98.0	98.1	7.6	7.4	-0.1	1.9	0.97
123	2020	nrr	36407	100.4	100.4	7.1	7.2	0.0	2.0	0.96
124	2021	nrr	31024	100.0	99.4	6.2	6.2	0.6	2.3	0.93
125	2022	nrr	17249	101.1	100.0	5.7	5.6	1.1	2.5	0.90
126	2023	nrr	12	.	.	.	.	.	.	0.71
127	2010	icf1	76334	96.4	96.6	5.6	5.8	-0.2	1.3	0.97
128	2011	icf1	74843	97.1	97.4	5.7	5.9	-0.3	1.4	0.97
129	2012	icf1	68431	97.2	97.5	5.6	5.7	-0.3	1.5	0.97
130	2013	icf1	64301	96.5	96.8	7.2	7.3	-0.3	1.5	0.98
131	2014	icf1	58435	96.6	96.8	7.0	7.0	-0.2	1.7	0.97
132	2015	icf1	51720	97.1	97.3	6.5	6.5	-0.2	1.8	0.96
133	2016	icf1	44656	98.3	98.5	6.2	6.1	-0.1	1.8	0.96
134	2017	icf1	38564	97.1	97.0	6.0	6.0	0.1	1.7	0.96
135	2018	icf1	33794	99.0	99.0	6.2	6.2	0.0	1.8	0.96
136	2019	icf1	29141	98.8	98.8	5.9	5.8	0.0	1.8	0.95
137	2020	icf1	27568	100.4	100.4	5.7	5.7	0.0	1.8	0.95
138	2021	icf1	13477	100.6	100.5	5.4	5.4	0.1	1.9	0.94
139	2022	icf1	16	.	.	.	.	.	.	0.89
140	2010	icf2	55812	97.5	97.7	6.5	6.5	-0.1	1.5	0.97
141	2011	icf2	54376	98.5	98.7	6.4	6.5	-0.3	1.5	0.97
142	2012	icf2	49104	98.7	99.0	6.3	6.3	-0.3	1.7	0.96
143	2013	icf2	45960	97.7	98.0	8.7	8.6	-0.3	1.8	0.98
144	2014	icf2	42863	97.5	97.8	8.4	8.3	-0.3	1.9	0.97
145	2015	icf2	37761	98.2	98.3	8.1	8.0	-0.1	2.0	0.97
146	2016	icf2	33253	99.1	99.2	7.3	7.2	-0.1	2.0	0.96
147	2017	icf2	28465	97.5	97.4	7.5	7.6	0.2	2.1	0.96
148	2018	icf2	24823	99.7	99.6	6.9	6.8	0.1	2.1	0.95

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	2019	icf2	21031	99.3	99.2	6.7	6.8	0.0	2.0	0.95
150	2020	icf2	10834	101.0	101.1	5.8	5.8	-0.1	2.1	0.93
151	2021	icf2	21	.	.	.	.	.	.	0.96
152	2010	icf3	33559	97.1	97.6	7.3	7.3	-0.5	1.6	0.97
153	2011	icf3	33126	98.2	98.8	7.0	7.1	-0.6	1.7	0.97
154	2012	icf3	30284	98.3	98.9	6.7	6.6	-0.6	1.9	0.96
155	2013	icf3	29336	97.6	98.1	9.2	9.1	-0.6	2.0	0.98
156	2014	icf3	27324	97.2	97.7	8.6	8.5	-0.5	2.1	0.97
157	2015	icf3	24431	98.0	98.3	8.4	8.2	-0.4	2.2	0.97
158	2016	icf3	21489	99.1	99.3	7.5	7.4	-0.2	2.2	0.96
159	2017	icf3	17998	97.8	97.6	7.6	7.6	0.1	2.2	0.96
160	2018	icf3	15114	100.2	100.0	7.0	6.9	0.1	2.3	0.95
161	2019	icf3	6344	100.2	100.3	6.6	6.6	0.0	2.3	0.94
162	2020	icf3	29	103.2	102.8	5.6	6.0	0.4	2.3	0.92
163	2010	icf	79923	96.6	97.0	6.3	6.4	-0.3	1.3	0.98
164	2011	icf	77844	97.6	98.0	6.2	6.3	-0.4	1.4	0.97
165	2012	icf	71131	97.8	98.2	6.1	6.1	-0.4	1.5	0.97
166	2013	icf	67079	96.8	97.3	8.4	8.4	-0.4	1.6	0.98
167	2014	icf	60968	96.7	97.1	8.0	7.9	-0.4	1.7	0.98
168	2015	icf	54000	97.4	97.7	7.5	7.4	-0.3	1.8	0.97
169	2016	icf	46610	98.6	98.7	6.9	6.8	-0.2	1.8	0.96
170	2017	icf	40096	97.1	97.0	6.9	6.9	0.1	1.8	0.96
171	2018	icf	35129	99.2	99.1	6.6	6.5	0.1	1.9	0.96
172	2019	icf	30118	99.0	99.0	6.3	6.3	0.0	1.9	0.96
173	2020	icf	27990	100.4	100.5	5.8	5.7	-0.1	1.9	0.95
174	2021	icf	13486	100.7	100.5	5.5	5.4	0.3	2.1	0.93
175	2022	icf	16	.	.	.	.	.	.	0.87
176	2010	ifl0	82201	95.7	96.5	7.2	7.3	-0.8	1.4	0.98
177	2011	ifl0	80671	96.4	97.3	7.1	7.1	-0.9	1.5	0.98
178	2012	ifl0	74834	97.2	98.3	7.0	6.9	-1.1	1.7	0.97
179	2013	ifl0	72693	97.1	98.0	6.8	6.7	-0.9	1.8	0.97
180	2014	ifl0	67217	97.2	97.9	6.9	6.7	-0.7	2.0	0.96
181	2015	ifl0	57970	97.4	98.0	7.0	6.8	-0.6	2.0	0.96
182	2016	ifl0	49766	98.2	98.7	7.2	7.1	-0.6	2.0	0.96
183	2017	ifl0	42586	98.7	99.0	7.3	7.2	-0.3	2.0	0.96
184	2018	ifl0	37299	98.8	99.0	6.9	6.7	-0.2	2.1	0.95
185	2019	ifl0	32430	98.8	98.6	8.0	8.0	0.2	2.1	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
186	2020	ifl0	30757	100.2	100.3	8.1	8.0	-0.1	2.1	0.96
187	2021	ifl0	28040	99.1	98.8	7.4	7.5	0.2	2.2	0.95
188	2022	ifl0	16839	99.5	98.8	7.9	7.8	0.7	2.4	0.96
189	2023	ifl0	12	.	.	.	.	.	.	0.82
190	2010	ifl1	75977	93.1	94.5	6.3	6.4	-1.4	1.4	0.98
191	2011	ifl1	74526	94.3	95.8	6.4	6.5	-1.5	1.5	0.97
192	2012	ifl1	68090	95.4	97.0	6.5	6.5	-1.6	1.6	0.97
193	2013	ifl1	63943	94.7	96.2	6.4	6.4	-1.5	1.7	0.96
194	2014	ifl1	58085	95.2	96.5	6.4	6.4	-1.3	1.8	0.96
195	2015	ifl1	51419	95.7	96.7	6.6	6.5	-1.1	1.9	0.96
196	2016	ifl1	44427	96.8	97.5	6.5	6.4	-0.8	1.9	0.95
197	2017	ifl1	38329	96.1	96.6	6.6	6.4	-0.4	1.9	0.96
198	2018	ifl1	33571	98.1	98.3	6.9	6.7	-0.2	1.9	0.96
199	2019	ifl1	28984	97.6	97.7	7.3	7.3	-0.1	1.9	0.97
200	2020	ifl1	27449	100.8	100.8	7.5	7.4	0.0	1.9	0.97
201	2021	ifl1	13781	100.2	99.8	6.7	6.6	0.4	2.1	0.95
202	2022	ifl1	37	100.2	99.6	5.8	5.7	0.6	1.9	0.94
203	2010	ifl2	55586	95.3	96.7	6.3	6.2	-1.4	1.4	0.97
204	2011	ifl2	54128	96.5	97.9	6.4	6.3	-1.5	1.5	0.97
205	2012	ifl2	48868	97.2	98.7	6.3	6.2	-1.5	1.7	0.96
206	2013	ifl2	45755	96.2	97.5	6.6	6.6	-1.3	1.8	0.96
207	2014	ifl2	42649	96.3	97.6	6.5	6.4	-1.2	1.9	0.96
208	2015	ifl2	37565	96.9	97.8	6.7	6.5	-1.0	1.9	0.96
209	2016	ifl2	33085	97.7	98.4	6.6	6.4	-0.7	1.9	0.96
210	2017	ifl2	28319	96.8	97.2	6.5	6.3	-0.4	1.9	0.95
211	2018	ifl2	24657	98.4	98.6	6.4	6.3	-0.2	1.9	0.95
212	2019	ifl2	20935	98.5	98.6	6.7	6.7	-0.1	1.9	0.96
213	2020	ifl2	11156	101.3	101.2	6.6	6.5	0.0	2.0	0.95
214	2021	ifl2	57	102.7	101.9	6.1	6.2	0.9	2.4	0.92
215	2010	ifl3	33416	95.6	97.1	7.0	6.8	-1.5	1.5	0.98
216	2011	ifl3	32986	97.1	98.6	7.0	6.8	-1.5	1.7	0.97
217	2012	ifl3	30130	97.7	99.2	6.7	6.5	-1.6	1.8	0.96
218	2013	ifl3	29186	96.7	98.1	7.1	7.0	-1.4	1.9	0.96
219	2014	ifl3	27204	96.7	98.1	6.9	6.7	-1.4	2.0	0.96
220	2015	ifl3	24324	97.5	98.6	6.9	6.6	-1.0	2.1	0.95
221	2016	ifl3	21381	98.4	99.2	6.6	6.4	-0.8	2.0	0.95
222	2017	ifl3	17911	97.6	98.0	6.5	6.3	-0.4	2.1	0.95

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
223	2018	ifl3	15074	99.0	99.3	6.3	6.2	-0.3	2.0	0.95
224	2019	ifl3	6622	99.5	99.7	6.3	6.2	-0.2	2.2	0.94
225	2020	ifl3	68	103.1	103.1	6.0	6.3	0.1	2.3	0.93
226	2010	ifl	98371	94.2	95.8	6.6	6.5	-1.5	1.3	0.98
227	2011	ifl	95546	95.4	97.0	6.7	6.6	-1.6	1.4	0.98
228	2012	ifl	88130	96.3	98.0	6.5	6.4	-1.7	1.5	0.97
229	2013	ifl	85015	95.2	96.8	6.7	6.7	-1.5	1.6	0.97
230	2014	ifl	78308	95.5	96.9	6.6	6.5	-1.4	1.7	0.97
231	2015	ifl	68184	96.1	97.3	6.7	6.5	-1.2	1.8	0.96
232	2016	ifl	58536	97.2	98.1	6.5	6.4	-0.9	1.8	0.96
233	2017	ifl	50440	96.2	96.7	6.5	6.3	-0.5	1.8	0.96
234	2018	ifl	44138	97.9	98.2	6.5	6.4	-0.3	1.8	0.96
235	2019	ifl	38305	97.8	98.0	7.0	7.0	-0.2	1.8	0.97
236	2020	ifl	36021	100.6	100.6	6.8	6.8	0.0	1.9	0.96
237	2021	ifl	30227	100.2	99.5	5.8	5.8	0.7	2.3	0.92
238	2022	ifl	16853	101.5	100.2	5.7	5.4	1.3	2.6	0.89
239	2023	ifl	12	.	.	.	.	.	.	0.80
240	2010	ais0	85079	97.9	98.3	6.4	6.4	-0.4	1.3	0.98
241	2011	ais0	83135	98.1	98.6	6.0	6.0	-0.5	1.5	0.97
242	2012	ais0	76710	98.9	99.6	6.2	6.1	-0.7	1.6	0.97
243	2013	ais0	74200	98.8	99.3	6.2	6.0	-0.6	1.7	0.96
244	2014	ais0	68233	98.6	99.1	6.3	6.2	-0.4	1.8	0.96
245	2015	ais0	58950	98.6	99.0	6.8	6.7	-0.4	1.9	0.96
246	2016	ais0	50700	98.9	99.2	6.8	6.8	-0.3	1.9	0.96
247	2017	ais0	43401	99.3	99.5	7.0	6.9	-0.3	1.9	0.96
248	2018	ais0	37998	99.0	99.1	6.3	6.2	-0.1	1.9	0.95
249	2019	ais0	33109	98.8	98.7	7.8	7.8	0.1	1.9	0.97
250	2020	ais0	31255	100.2	100.3	7.9	7.8	0.0	1.9	0.97
251	2021	ais0	28778	98.9	98.7	6.8	6.8	0.2	1.9	0.96
252	2022	ais0	17372	98.6	98.2	7.2	7.2	0.4	2.0	0.96
253	2023	ais0	12	.	.	.	.	.	.	0.81
254	2010	ais1	74782	94.8	95.6	6.5	6.6	-0.9	1.4	0.98
255	2011	ais1	73303	95.6	96.6	6.4	6.5	-1.0	1.5	0.97
256	2012	ais1	66900	96.6	97.7	6.6	6.6	-1.1	1.6	0.97
257	2013	ais1	62740	96.5	97.6	5.9	5.9	-1.0	1.7	0.96
258	2014	ais1	57230	96.8	97.8	6.1	6.1	-1.0	1.9	0.95
259	2015	ais1	50616	96.8	97.6	6.4	6.3	-0.8	2.0	0.95

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
260	2016	ais1	43774	97.3	97.9	6.9	6.9	-0.6	2.0	0.96
261	2017	ais1	37822	97.2	97.6	6.8	6.6	-0.4	2.0	0.96
262	2018	ais1	33107	98.1	98.4	6.9	6.8	-0.3	2.0	0.96
263	2019	ais1	28551	97.6	97.7	7.6	7.6	-0.1	2.0	0.97
264	2020	ais1	27087	100.9	100.9	8.1	8.0	0.0	2.0	0.97
265	2021	ais1	13012	100.2	99.9	6.9	6.9	0.3	2.2	0.95
266	2022	ais1	13	.	.	.	.	.	.	0.94
267	2010	ais2	54544	97.8	98.5	6.4	6.2	-0.7	1.5	0.97
268	2011	ais2	53140	98.5	99.2	6.4	6.3	-0.8	1.5	0.97
269	2012	ais2	47930	99.0	99.8	6.4	6.3	-0.8	1.7	0.96
270	2013	ais2	44971	98.2	98.9	5.9	5.8	-0.8	1.8	0.95
271	2014	ais2	41983	98.2	99.0	6.0	5.9	-0.8	1.9	0.95
272	2015	ais2	36988	98.1	98.7	6.3	6.1	-0.6	2.0	0.95
273	2016	ais2	32645	98.5	99.0	6.8	6.6	-0.5	2.0	0.96
274	2017	ais2	27853	98.1	98.4	6.6	6.4	-0.3	2.0	0.95
275	2018	ais2	24312	98.4	98.6	6.6	6.4	-0.2	2.0	0.95
276	2019	ais2	20633	98.5	98.6	7.0	6.9	-0.1	2.0	0.96
277	2020	ais2	10482	101.1	101.0	6.9	6.9	0.1	2.1	0.95
278	2021	ais2	20	.	.	.	.	.	.	0.91
279	2010	ais3	32602	98.0	98.7	7.2	6.9	-0.8	1.6	0.98
280	2011	ais3	32236	98.8	99.6	7.3	7.0	-0.7	1.7	0.97
281	2012	ais3	29554	99.3	100.1	7.1	6.8	-0.8	1.8	0.97
282	2013	ais3	28672	98.4	99.1	6.7	6.4	-0.7	2.0	0.96
283	2014	ais3	26696	98.3	99.1	6.8	6.5	-0.8	2.0	0.95
284	2015	ais3	23850	98.8	99.4	6.5	6.3	-0.6	2.1	0.95
285	2016	ais3	20968	99.3	99.7	7.0	6.7	-0.4	2.1	0.95
286	2017	ais3	17601	98.9	99.1	6.8	6.6	-0.2	2.1	0.95
287	2018	ais3	14802	98.7	99.0	6.9	6.7	-0.3	2.1	0.95
288	2019	ais3	6112	99.4	99.6	7.1	6.8	-0.1	2.2	0.95
289	2020	ais3	27	103.8	104.3	6.5	6.9	-0.6	2.1	0.95
290	2010	ais	99326	96.7	97.6	6.6	6.5	-0.9	1.3	0.98
291	2011	ais	96216	97.3	98.3	6.7	6.5	-0.9	1.4	0.98
292	2012	ais	88569	98.1	99.1	6.6	6.5	-1.0	1.5	0.97
293	2013	ais	85373	97.4	98.3	5.9	5.8	-0.9	1.6	0.96
294	2014	ais	78553	97.4	98.4	6.1	6.0	-0.9	1.7	0.96
295	2015	ais	68394	97.6	98.4	6.2	6.0	-0.8	1.8	0.96
296	2016	ais	58714	98.2	98.8	6.7	6.5	-0.5	1.8	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
297	2017	ais	50690	97.7	98.1	6.5	6.4	-0.4	1.8	0.96
298	2018	ais	44384	98.0	98.4	6.6	6.5	-0.3	1.8	0.96
299	2019	ais	38535	98.0	98.1	7.2	7.1	-0.1	1.8	0.97
300	2020	ais	36173	100.6	100.6	6.9	6.9	0.0	1.9	0.96
301	2021	ais	30820	100.0	99.4	5.6	5.7	0.6	2.3	0.92
302	2022	ais	17382	100.7	99.7	5.5	5.3	0.9	2.4	0.90
303	2023	ais	12	.	.	.	.	.	.	0.61
304	2010	hst0	29814	98.0	99.3	7.0	7.1	-1.2	1.5	0.98
305	2011	hst0	29377	97.9	99.0	7.0	7.0	-1.2	1.5	0.98
306	2012	hst0	27298	98.2	99.2	7.3	7.4	-1.1	1.7	0.97
307	2013	hst0	26143	97.4	98.4	7.2	7.3	-1.0	1.8	0.97
308	2014	hst0	23635	97.3	98.0	6.9	6.9	-0.7	2.0	0.96
309	2015	hst0	20385	98.1	98.8	6.9	7.0	-0.7	2.0	0.96
310	2016	hst0	17603	98.8	99.2	6.8	7.0	-0.4	2.0	0.96
311	2017	hst0	16083	98.4	98.7	6.3	6.3	-0.3	2.1	0.95
312	2018	hst0	14930	98.9	99.2	6.4	6.4	-0.3	2.1	0.95
313	2019	hst0	13577	100.2	100.2	6.2	6.2	-0.1	2.2	0.94
314	2020	hst0	12532	99.8	100.0	6.4	6.5	-0.2	2.2	0.94
315	2021	hst0	11108	100.8	100.7	6.2	6.1	0.2	2.1	0.94
316	2022	hst0	5301	101.2	100.7	6.5	6.8	0.5	2.5	0.93
317	2023	hst0	1	.	.	.	.	.	.	.
318	2010	hst1	27058	98.9	100.0	6.0	6.0	-1.1	1.4	0.97
319	2011	hst1	27137	98.8	99.9	6.4	6.3	-1.1	1.6	0.97
320	2012	hst1	24592	98.7	99.8	6.5	6.4	-1.1	1.6	0.97
321	2013	hst1	22754	97.6	98.7	7.6	7.5	-1.1	1.7	0.97
322	2014	hst1	20485	97.2	98.2	7.1	7.0	-1.0	1.8	0.97
323	2015	hst1	18027	98.0	99.0	6.6	6.5	-1.0	1.9	0.96
324	2016	hst1	15940	99.3	99.9	7.1	7.1	-0.7	1.9	0.96
325	2017	hst1	14848	98.3	98.7	6.5	6.5	-0.4	1.9	0.96
326	2018	hst1	13757	99.7	99.9	6.5	6.3	-0.2	1.9	0.95
327	2019	hst1	12098	99.8	99.9	5.9	5.8	-0.1	1.9	0.94
328	2020	hst1	11266	100.3	100.5	6.4	6.3	-0.1	1.9	0.95
329	2021	hst1	4556	101.2	101.0	5.8	5.7	0.2	1.9	0.94
330	2022	hst1	6	.	.	.	.	.	.	0.99
331	2010	hst2	19000	100.0	100.7	6.7	6.7	-0.7	1.6	0.97
332	2011	hst2	18883	100.5	101.2	7.2	7.1	-0.7	1.7	0.97
333	2012	hst2	16658	100.4	101.1	7.0	7.0	-0.7	2.0	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
334	2013	hst2	15574	99.5	100.3	8.1	7.9	-0.8	2.0	0.97
335	2014	hst2	14349	99.0	99.8	7.7	7.4	-0.8	2.1	0.96
336	2015	hst2	12606	99.5	100.2	7.5	7.2	-0.7	2.3	0.95
337	2016	hst2	11617	100.7	101.1	8.0	7.9	-0.4	2.2	0.96
338	2017	hst2	10779	99.2	99.2	7.8	7.7	0.0	2.3	0.96
339	2018	hst2	9782	100.3	100.4	6.8	6.5	-0.1	2.3	0.94
340	2019	hst2	8205	100.8	100.9	6.7	6.5	-0.1	2.2	0.94
341	2020	hst2	3341	101.1	101.1	6.8	6.6	0.0	2.2	0.95
342	2021	hst2	6	.	.	.	.	.	.	0.82
343	2010	hst3	10864	100.6	101.6	7.1	7.0	-1.0	1.9	0.96
344	2011	hst3	10965	101.4	102.3	7.9	7.7	-0.9	2.0	0.97
345	2012	hst3	9799	100.7	101.6	7.8	7.6	-0.9	2.2	0.96
346	2013	hst3	9352	100.5	101.5	8.6	8.3	-1.1	2.3	0.96
347	2014	hst3	8824	99.4	100.3	8.3	8.1	-0.9	2.4	0.96
348	2015	hst3	7750	99.7	100.4	8.5	8.4	-0.6	2.4	0.96
349	2016	hst3	7201	102.0	102.3	8.7	8.6	-0.3	2.6	0.96
350	2017	hst3	6291	100.2	100.3	8.2	8.2	-0.1	2.4	0.96
351	2018	hst3	5512	101.3	101.6	7.4	7.3	-0.3	2.5	0.94
352	2019	hst3	1913	102.3	102.5	7.0	7.2	-0.1	2.7	0.93
353	2020	hst3	7	.	.	.	.	.	.	0.86
354	2010	hst	37159	99.6	100.6	5.9	5.9	-1.0	1.4	0.97
355	2011	hst	36378	99.9	100.9	6.6	6.4	-1.0	1.5	0.97
356	2012	hst	33613	99.6	100.6	6.6	6.5	-1.0	1.6	0.97
357	2013	hst	32064	98.7	99.8	7.7	7.5	-1.1	1.7	0.98
358	2014	hst	29014	98.1	99.1	7.2	7.0	-1.0	1.8	0.97
359	2015	hst	25239	98.7	99.5	7.0	6.8	-0.8	1.9	0.96
360	2016	hst	21940	100.4	100.9	7.5	7.5	-0.5	1.9	0.97
361	2017	hst	20194	98.9	99.1	7.0	7.0	-0.2	1.9	0.96
362	2018	hst	18592	100.1	100.3	6.4	6.2	-0.2	1.9	0.95
363	2019	hst	16492	100.5	100.7	5.9	5.9	-0.1	2.0	0.94
364	2020	hst	15152	100.5	100.6	6.0	5.8	-0.1	2.1	0.94
365	2021	hst	12005	101.5	101.1	5.2	5.0	0.4	2.3	0.90
366	2022	hst	5306	101.7	101.1	5.1	4.9	0.7	2.6	0.86
367	2023	hst	1	.	.	.	.	.	.	.
368	2010	fert	79923	94.6	95.9	6.7	6.6	-1.4	1.3	0.98
369	2011	fert	77844	95.8	97.2	6.7	6.6	-1.5	1.5	0.98
370	2012	fert	71131	96.6	98.1	6.5	6.4	-1.5	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
371	2013	fert	67079	95.6	97.0	6.6	6.6	-1.4	1.7	0.97
372	2014	fert	60968	95.8	97.1	6.6	6.5	-1.3	1.8	0.96
373	2015	fert	54000	96.4	97.4	6.7	6.5	-1.1	1.9	0.96
374	2016	fert	46610	97.4	98.2	6.6	6.4	-0.8	1.9	0.96
375	2017	fert	40096	96.6	97.0	6.5	6.4	-0.4	1.9	0.96
376	2018	fert	35129	98.0	98.3	6.6	6.5	-0.3	1.9	0.96
377	2019	fert	30118	98.0	98.1	7.2	7.2	-0.1	1.9	0.97
378	2020	fert	27990	100.7	100.8	7.1	7.1	0.0	1.9	0.96
379	2021	fert	13486	100.4	99.9	6.1	6.0	0.5	2.3	0.93
380	2022	fert	16	.	.	.	.	.	.	0.83

RDC SS and traditional breeding value for nongenotyped females with phenotype

Obs	diff	d_cr	d_nrr	d_icf	d_ifl	d_ais	d_hst	d_fert
1	-17	.	.	.	.	.	1	.
2	-16	.	1	.	.	1	.	.
3	-15	.	1	.	1	.	1	1
4	-14	4	6	3	2	.	3	4
5	-13	15	7	3	8	7	9	7
6	-12	31	37	19	25	21	16	16
7	-11	90	65	39	61	48	36	64
8	-10	218	159	88	171	121	77	127
9	-9	434	395	162	364	285	182	301
10	-8	1063	894	376	864	625	373	715
11	-7	2459	2117	888	1858	1373	778	1479
12	-6	6003	5067	2004	4618	3369	1653	3482
13	-5	13722	11601	4249	10591	7699	3338	7934
14	-4	35717	24756	9586	25863	17066	7099	18610
15	-3	108225	60991	22115	68134	41478	18194	49553
16	-2	261109	186535	54344	209255	113176	49863	145087
17	-1	182295	248353	160116	239088	281375	100132	198994
18	0	95537	130185	212054	115385	188879	64706	95751
19	1	46115	62071	79504	52154	69532	27787	40627
20	2	23860	30118	29625	26307	33252	14298	19080
21	3	13612	16671	13735	15562	16923	7016	10250
22	4	7639	8734	7209	8129	8279	3412	5412
23	5	3779	4050	3874	4484	4564	1976	3140
24	6	1926	1985	2137	2522	2464	1183	1760
25	7	1136	1111	1063	1300	1275	543	954
26	8	619	510	588	668	652	253	532
27	9	272	231	296	326	325	113	251
28	10	107	134	132	189	161	64	138
29	11	43	51	91	80	103	19	63
30	12	20	24	39	35	45	10	28
31	13	10	7	24	22	19	8	17
32	14	3	2	15	9	18	4	4
33	15	1	.	7	7	2	1	4
34	16	1	.	2	2	2	1	3
35	17	.	.	3	.	1	.	.
36	18	.	.	.	.	1	.	2
37	19	.	.	.	2	.	.	.

RDC SS and traditional breeding value for nongenotyped females with phenotype

Obs	diff	p_cr	p_nrr	p_icf	p_ifl	p_ais	p_hst	p_fert
1	-17	.	.	.	.	.	0	.
2	-16	.	0	.	.	0	.	.
3	-15	.	0	.	0	.	0	0
4	-14	0	0	0	0	.	0	0
5	-13	0	0	0	0	0	0	0
6	-12	0	0	0	0	0	0	0
7	-11	0	0	0	0	0	0	0
8	-10	0	0	0	0	0	0	0
9	-9	0	0	0	0	0	0	0
10	-8	0	0	0	0	0	0	0
11	-7	0	0	0	0	0	0	0
12	-6	1	1	0	1	0	1	1
13	-5	2	1	1	1	1	1	1
14	-4	4	3	2	3	2	2	3
15	-3	13	8	4	9	5	6	8
16	-2	32	23	9	27	14	16	24
17	-1	23	31	26	30	35	33	33
18	0	12	16	35	15	24	21	16
19	1	6	8	13	7	9	9	7
20	2	3	4	5	3	4	5	3
21	3	2	2	2	2	2	2	2
22	4	1	1	1	1	1	1	1
23	5	0	1	1	1	1	1	1
24	6	0	0	0	0	0	0	0
25	7	0	0	0	0	0	0	0
26	8	0	0	0	0	0	0	0
27	9	0	0	0	0	0	0	0
28	10	0	0	0	0	0	0	0
29	11	0	0	0	0	0	0	0
30	12	0	0	0	0	0	0	0
31	13	0	0	0	0	0	0	0
32	14	0	0	0	0	0	0	0
33	15	0	.	0	0	0	0	0
34	16	0	.	0	0	0	0	0
35	17	.	.	0	.	0	.	.
36	18	.	.	.	.	0	.	0
37	19	.	.	.	0	.	.	.

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	cr0	165	261	620	93.0	95.1	9.2	8.9	-2.1	3.8	0.91
2	2011	cr0	168	323	692	94.3	95.4	9.0	9.0	-1.1	3.4	0.93
3	2012	cr0	169	309	560	98.8	99.9	8.4	8.7	-1.1	3.4	0.92
4	2013	cr0	122	436	725	97.5	98.0	9.4	9.2	-0.4	3.1	0.94
5	2014	cr0	85	665	955	98.1	97.2	11.7	11.6	0.9	2.9	0.97
6	2015	cr0	71	735	898	101.7	100.6	10.4	10.4	1.1	2.7	0.97
7	2016	cr0	70	710	1010	100.1	98.8	9.3	10.2	1.3	3.1	0.95
8	2017	cr0	66	797	1103	103.9	103.0	11.2	12.0	0.9	2.9	0.97
9	2018	cr0	52	863	1218	101.9	101.8	10.0	9.9	0.1	3.2	0.95
10	2019	cr0	49	555	620	103.8	102.0	11.2	11.7	1.8	3.4	0.96
11	2020	cr0	23	100	121	103.3	102.3	7.8	7.1	1.0	4.3	0.84
12	2010	cr1	165	216	513	88.3	91.4	8.6	8.7	-3.1	3.5	0.92
13	2011	cr1	168	262	564	92.3	94.1	9.3	9.5	-1.8	3.2	0.94
14	2012	cr1	169	252	459	95.1	97.0	9.1	9.2	-1.9	3.3	0.94
15	2013	cr1	122	358	597	95.5	96.4	8.9	8.7	-0.9	2.7	0.95
16	2014	cr1	85	545	789	97.2	96.6	9.8	9.8	0.6	2.6	0.97
17	2015	cr1	71	595	734	100.7	99.4	9.5	9.4	1.3	2.5	0.96
18	2016	cr1	70	575	825	99.3	98.1	10.4	10.7	1.1	3.0	0.96
19	2017	cr1	66	632	874	102.2	100.9	11.2	11.7	1.3	2.5	0.98
20	2018	cr1	51	453	669	102.9	101.9	11.0	10.4	0.9	3.8	0.94
21	2019	cr1	15	107	101	100.5	95.9	9.7	10.9	4.6	4.2	0.92
22	2010	cr2	165	154	378	88.9	92.3	8.2	8.2	-3.4	3.3	0.92
23	2011	cr2	168	188	408	92.7	94.9	9.4	9.2	-2.3	3.0	0.95
24	2012	cr2	169	186	342	94.9	97.0	9.2	8.9	-2.0	3.2	0.94
25	2013	cr2	122	265	446	95.5	96.5	8.7	8.5	-1.0	2.6	0.95
26	2014	cr2	84	410	590	97.3	97.3	9.9	9.8	-0.1	2.5	0.97
27	2015	cr2	71	447	571	100.1	99.0	9.1	9.0	1.1	2.2	0.97
28	2016	cr2	70	411	595	99.3	98.5	10.2	10.3	0.8	3.0	0.96
29	2017	cr2	64	323	441	101.4	100.1	10.8	11.1	1.3	2.4	0.98
30	2018	cr2	19	70	73	104.1	103.9	12.4	11.3	0.1	3.1	0.97
31	2010	cr3	159	101	258	89.2	92.4	8.5	8.4	-3.2	3.2	0.93
32	2011	cr3	162	122	260	93.1	95.3	9.7	9.4	-2.2	3.0	0.95
33	2012	cr3	165	122	220	94.8	96.9	9.3	9.0	-2.0	3.3	0.94
34	2013	cr3	116	181	296	95.9	96.9	8.4	8.3	-1.0	2.5	0.96
35	2014	cr3	84	258	366	97.5	97.6	10.0	9.7	-0.1	2.4	0.97
36	2015	cr3	71	278	360	100.0	98.9	9.0	8.9	1.0	2.4	0.96
37	2016	cr3	61	200	296	100.3	99.5	9.7	10.1	0.8	2.8	0.96

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	2017	cr3	19	60	61	99.9	99.3	12.2	12.1	0.6	1.8	0.99
39	2010	cr	165	279	658	88.5	91.9	8.5	8.5	-3.3	3.4	0.92
40	2011	cr	168	347	739	92.4	94.6	9.6	9.6	-2.2	3.1	0.95
41	2012	cr	169	332	598	94.8	96.8	9.4	9.2	-2.0	3.3	0.94
42	2013	cr	122	467	768	95.3	96.3	8.9	8.6	-0.9	2.7	0.95
43	2014	cr	85	711	1016	97.2	97.1	10.1	9.9	0.1	2.5	0.97
44	2015	cr	71	785	952	100.2	99.1	9.3	9.2	1.1	2.4	0.97
45	2016	cr	70	754	1067	99.4	98.4	10.4	10.5	1.0	3.2	0.95
46	2017	cr	66	843	1160	101.6	100.2	10.8	11.1	1.4	2.6	0.97
47	2018	cr	52	886	1248	102.3	101.5	10.6	9.7	0.8	4.0	0.93
48	2019	cr	49	556	622	105.1	101.2	8.4	8.3	3.9	4.1	0.88
49	2020	cr	23	100	121	105.7	103.3	8.9	6.8	2.5	4.6	0.86
50	2010	nrr0	165	247	588	96.7	98.5	8.2	7.9	-1.8	4.3	0.86
51	2011	nrr0	168	303	649	97.7	98.6	9.1	9.0	-1.0	4.1	0.90
52	2012	nrr0	169	293	530	100.8	101.5	8.8	9.6	-0.7	4.2	0.90
53	2013	nrr0	122	412	683	99.6	100.0	9.2	9.7	-0.5	3.7	0.93
54	2014	nrr0	85	628	906	99.6	98.9	12.1	12.0	0.7	3.3	0.96
55	2015	nrr0	71	698	858	102.0	101.5	10.6	11.0	0.5	2.9	0.96
56	2016	nrr0	70	674	963	100.3	99.0	9.2	10.7	1.3	3.7	0.94
57	2017	nrr0	66	758	1055	102.3	101.4	10.8	11.5	0.9	3.1	0.96
58	2018	nrr0	52	840	1192	99.1	99.7	9.6	9.7	-0.6	3.2	0.94
59	2019	nrr0	50	637	692	100.1	99.1	11.3	11.9	0.9	3.3	0.96
60	2020	nrr0	35	191	259	100.5	99.7	7.9	7.7	0.7	3.5	0.90
61	2010	nrr1	165	208	496	91.8	94.2	8.9	8.7	-2.3	3.5	0.92
62	2011	nrr1	168	252	544	94.8	96.0	10.3	10.1	-1.3	4.0	0.92
63	2012	nrr1	169	243	443	97.1	98.5	9.5	9.6	-1.3	3.5	0.93
64	2013	nrr1	122	346	576	97.4	98.2	8.2	8.1	-0.8	3.3	0.92
65	2014	nrr1	85	528	765	98.9	98.6	10.3	10.3	0.3	3.0	0.96
66	2015	nrr1	71	578	711	101.0	100.4	9.2	8.7	0.6	2.9	0.95
67	2016	nrr1	70	558	799	99.7	98.9	11.0	10.9	0.8	3.3	0.95
68	2017	nrr1	66	624	867	100.8	99.3	10.7	11.2	1.5	3.1	0.96
69	2018	nrr1	52	517	752	101.1	100.3	10.1	9.1	0.8	3.3	0.95
70	2019	nrr1	22	178	184	100.5	97.1	8.2	7.6	3.4	3.6	0.90
71	2010	nrr2	165	149	366	91.8	94.1	8.8	8.4	-2.3	3.9	0.90
72	2011	nrr2	168	182	395	94.1	95.9	10.7	10.4	-1.8	4.0	0.93
73	2012	nrr2	169	180	331	96.5	98.0	9.3	9.1	-1.5	3.8	0.92
74	2013	nrr2	122	257	433	95.8	96.6	8.7	8.5	-0.8	3.6	0.91

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	2014	nrr2	84	397	571	98.8	99.0	11.6	11.5	-0.2	3.1	0.97
76	2015	nrr2	71	432	554	99.5	99.5	9.5	9.4	0.1	2.6	0.96
77	2016	nrr2	70	406	584	99.4	99.0	12.0	12.0	0.5	3.4	0.96
78	2017	nrr2	65	372	513	99.5	98.8	10.6	10.9	0.8	3.5	0.95
79	2018	nrr2	31	119	155	99.2	99.3	12.7	11.1	-0.1	3.8	0.96
80	2010	nrr3	158	98	250	91.4	93.8	9.8	8.9	-2.3	3.8	0.92
81	2011	nrr3	160	120	254	94.5	96.4	11.6	10.9	-1.9	4.0	0.94
82	2012	nrr3	165	118	214	96.7	98.4	9.8	9.6	-1.7	3.6	0.93
83	2013	nrr3	114	177	287	96.6	97.5	8.6	8.3	-0.9	3.4	0.92
84	2014	nrr3	84	250	354	99.0	99.4	11.9	11.7	-0.4	3.0	0.97
85	2015	nrr3	71	275	358	100.4	99.9	9.9	9.5	0.5	3.0	0.95
86	2016	nrr3	67	211	316	99.0	98.9	11.7	11.4	0.1	3.4	0.96
87	2017	nrr3	32	91	106	98.9	97.4	12.2	12.6	1.5	2.7	0.98
88	2010	nrr	165	275	647	91.5	93.9	8.9	8.4	-2.4	3.6	0.92
89	2011	nrr	168	341	724	94.3	96.0	10.7	10.3	-1.7	3.8	0.94
90	2012	nrr	169	326	588	96.7	98.3	9.4	9.3	-1.6	3.4	0.93
91	2013	nrr	122	459	756	96.3	97.2	8.3	8.1	-0.9	3.4	0.92
92	2014	nrr	85	698	1001	98.9	99.1	11.2	11.0	-0.2	2.8	0.97
93	2015	nrr	71	774	941	100.4	99.9	9.3	8.9	0.5	2.5	0.96
94	2016	nrr	70	742	1053	99.4	98.9	11.3	11.2	0.5	3.5	0.95
95	2017	nrr	66	833	1153	100.2	99.0	10.4	10.7	1.2	3.3	0.95
96	2018	nrr	52	890	1258	100.2	99.9	10.6	9.1	0.3	3.6	0.94
97	2019	nrr	50	643	700	102.9	99.3	7.5	6.8	3.6	4.3	0.82
98	2020	nrr	35	191	259	102.3	101.3	7.2	5.3	1.0	4.3	0.80
99	2010	icf1	165	210	500	96.8	97.5	8.9	8.5	-0.7	3.2	0.94
100	2011	icf1	168	254	548	97.4	97.8	9.8	9.8	-0.4	2.6	0.97
101	2012	icf1	169	245	447	97.3	97.5	8.9	8.8	-0.1	2.7	0.95
102	2013	icf1	122	349	582	99.9	99.9	8.9	8.9	0.0	2.3	0.97
103	2014	icf1	85	532	772	97.7	97.5	8.5	8.4	0.3	2.2	0.96
104	2015	icf1	71	583	718	99.5	98.4	10.6	10.7	1.1	2.1	0.98
105	2016	icf1	70	563	806	98.4	98.2	8.0	7.9	0.2	2.2	0.96
106	2017	icf1	66	630	875	99.5	99.2	9.6	9.8	0.4	2.7	0.96
107	2018	icf1	52	519	754	101.5	101.1	9.5	9.5	0.4	2.8	0.96
108	2019	icf1	22	166	178	99.9	98.7	6.6	6.5	1.1	3.6	0.85
109	2010	icf2	165	150	370	98.0	98.5	10.1	9.5	-0.5	3.5	0.94
110	2011	icf2	168	184	399	98.4	99.0	11.0	10.7	-0.6	2.8	0.97
111	2012	icf2	169	182	335	97.8	98.2	10.4	9.9	-0.4	2.9	0.96

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	2013	icf2	122	260	438	101.0	101.0	10.0	10.0	0.0	2.5	0.97
113	2014	icf2	84	401	577	97.9	97.7	10.9	10.9	0.2	2.4	0.98
114	2015	icf2	71	437	560	100.2	98.9	11.8	11.5	1.3	2.2	0.98
115	2016	icf2	70	410	591	98.4	98.0	9.2	8.7	0.4	2.5	0.96
116	2017	icf2	65	373	513	100.3	99.9	10.4	10.3	0.4	3.0	0.96
117	2018	icf2	28	118	146	103.9	104.5	8.7	8.3	-0.6	2.3	0.96
118	2010	icf3	159	99	252	98.1	99.1	10.6	9.9	-0.9	3.5	0.94
119	2011	icf3	160	121	257	98.4	99.2	11.3	10.9	-0.8	3.0	0.96
120	2012	icf3	165	119	217	97.2	97.7	10.4	9.9	-0.5	3.1	0.95
121	2013	icf3	115	178	291	101.1	101.0	10.7	10.5	0.1	2.5	0.97
122	2014	icf3	84	254	359	98.4	98.1	11.1	10.9	0.3	2.5	0.97
123	2015	icf3	71	279	363	99.5	98.2	12.1	11.6	1.3	2.6	0.98
124	2016	icf3	67	214	320	99.0	98.3	9.5	9.2	0.6	2.5	0.96
125	2017	icf3	31	84	99	99.9	99.7	9.7	9.9	0.1	3.0	0.95
126	2010	icf	165	218	519	97.5	98.3	9.8	9.2	-0.7	3.4	0.94
127	2011	icf	168	265	571	97.9	98.5	10.6	10.4	-0.6	2.6	0.97
128	2012	icf	169	256	465	97.5	97.8	9.7	9.3	-0.3	2.8	0.96
129	2013	icf	122	364	605	100.7	100.6	9.7	9.7	0.2	2.4	0.97
130	2014	icf	85	553	800	98.0	97.7	10.0	9.9	0.3	2.3	0.97
131	2015	icf	71	606	747	99.6	98.4	11.3	11.0	1.3	2.3	0.98
132	2016	icf	70	584	835	98.6	98.3	8.6	8.4	0.3	2.4	0.96
133	2017	icf	66	647	899	100.0	99.5	10.0	9.8	0.5	2.9	0.96
134	2018	icf	52	522	759	101.3	101.0	9.2	9.0	0.3	3.0	0.95
135	2019	icf	22	166	178	100.4	99.2	7.6	7.3	1.2	4.0	0.86
136	2010	ifl0	165	237	565	96.0	97.9	10.2	9.9	-1.9	4.2	0.91
137	2011	ifl0	168	291	624	97.1	97.9	9.0	9.2	-0.8	3.9	0.91
138	2012	ifl0	169	282	512	100.8	101.3	8.6	9.1	-0.5	4.1	0.90
139	2013	ifl0	122	397	660	98.7	99.3	9.4	9.4	-0.6	3.5	0.93
140	2014	ifl0	85	603	869	99.1	98.4	12.1	12.2	0.8	3.1	0.97
141	2015	ifl0	71	674	827	101.9	101.2	11.3	11.7	0.7	2.8	0.97
142	2016	ifl0	70	648	926	100.2	99.0	10.5	11.9	1.2	3.5	0.96
143	2017	ifl0	66	733	1021	102.6	101.7	10.8	11.5	1.0	2.8	0.97
144	2018	ifl0	52	814	1158	100.6	100.8	10.8	11.2	-0.2	3.2	0.96
145	2019	ifl0	50	621	673	101.7	100.0	11.7	12.7	1.7	3.6	0.96
146	2020	ifl0	35	189	255	101.6	99.7	7.8	7.6	1.9	3.5	0.90
147	2010	ifl1	165	209	498	91.4	94.0	9.3	9.0	-2.6	3.6	0.92
148	2011	ifl1	168	253	545	94.7	96.2	9.6	9.9	-1.5	3.2	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	2012	ifl1	169	244	444	96.5	98.2	9.6	9.5	-1.7	3.2	0.95
150	2013	ifl1	122	348	580	97.4	98.2	9.2	9.0	-0.8	2.9	0.95
151	2014	ifl1	85	530	768	97.4	97.2	9.2	9.3	0.2	2.8	0.95
152	2015	ifl1	71	581	715	100.8	99.6	10.5	10.5	1.2	2.9	0.96
153	2016	ifl1	70	559	801	98.3	97.5	10.6	10.6	0.7	2.7	0.97
154	2017	ifl1	66	628	873	100.8	99.5	11.2	11.4	1.3	2.1	0.98
155	2018	ifl1	52	521	759	101.2	100.4	10.6	9.9	0.8	3.2	0.95
156	2019	ifl1	22	181	186	100.8	97.2	8.6	8.3	3.6	3.4	0.92
157	2010	ifl2	165	150	368	92.9	95.5	8.9	8.6	-2.6	3.4	0.93
158	2011	ifl2	168	183	397	95.4	97.2	9.6	9.6	-1.8	3.1	0.95
159	2012	ifl2	169	181	333	96.8	98.5	9.7	9.2	-1.6	3.1	0.95
160	2013	ifl2	122	259	436	97.6	98.5	9.2	8.8	-0.9	2.9	0.95
161	2014	ifl2	84	399	574	97.8	98.1	9.4	9.4	-0.4	2.7	0.96
162	2015	ifl2	71	435	557	100.2	99.2	9.4	9.6	1.0	2.4	0.97
163	2016	ifl2	70	409	588	98.6	98.3	10.1	9.9	0.4	2.6	0.97
164	2017	ifl2	65	375	518	100.3	99.5	10.4	10.5	0.8	2.4	0.97
165	2018	ifl2	31	120	156	101.0	101.0	10.3	9.4	0.0	3.0	0.96
166	2010	ifl3	159	98	251	93.2	95.8	9.5	9.0	-2.6	3.3	0.94
167	2011	ifl3	160	121	256	95.7	97.6	9.9	9.6	-1.9	3.1	0.95
168	2012	ifl3	165	119	216	96.8	98.6	9.9	9.4	-1.8	3.0	0.95
169	2013	ifl3	115	178	289	98.2	99.0	9.1	8.6	-0.8	2.7	0.95
170	2014	ifl3	84	253	358	98.1	98.4	9.5	9.2	-0.3	2.7	0.96
171	2015	ifl3	71	278	362	100.4	99.4	9.5	9.5	0.9	2.7	0.96
172	2016	ifl3	67	215	321	98.8	98.3	10.2	10.1	0.5	2.9	0.96
173	2017	ifl3	32	93	108	99.7	98.8	11.7	11.9	0.9	2.4	0.98
174	2010	ifl	165	272	641	92.3	95.1	9.3	8.9	-2.8	3.4	0.93
175	2011	ifl	168	337	719	95.0	96.8	9.9	9.9	-1.8	3.1	0.95
176	2012	ifl	169	323	584	96.7	98.5	9.9	9.4	-1.8	3.0	0.95
177	2013	ifl	122	455	749	97.5	98.4	9.3	8.8	-0.9	2.9	0.95
178	2014	ifl	85	692	992	97.8	98.0	9.5	9.4	-0.2	2.7	0.96
179	2015	ifl	71	766	932	100.5	99.4	9.9	9.8	1.0	2.6	0.97
180	2016	ifl	70	735	1042	98.6	98.0	10.3	10.2	0.5	2.9	0.96
181	2017	ifl	66	826	1143	100.7	99.6	10.4	10.5	1.1	2.4	0.97
182	2018	ifl	52	875	1238	100.9	100.3	10.0	9.2	0.7	3.5	0.94
183	2019	ifl	50	628	681	104.5	100.4	7.5	7.3	4.0	3.9	0.86
184	2020	ifl	35	189	255	104.6	101.7	6.9	5.2	2.9	4.6	0.74
185	2010	ais0	165	243	578	96.7	98.3	9.1	8.7	-1.6	4.0	0.90

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
186	2011	ais0	168	297	636	97.9	98.6	9.2	9.2	-0.8	3.7	0.92
187	2012	ais0	169	287	520	100.9	101.7	8.6	9.2	-0.8	4.0	0.90
188	2013	ais0	122	404	671	99.6	100.2	8.9	9.1	-0.6	3.5	0.93
189	2014	ais0	85	617	890	99.1	98.8	12.1	11.7	0.3	3.3	0.96
190	2015	ais0	71	688	843	101.8	101.2	10.9	11.0	0.5	2.5	0.97
191	2016	ais0	70	662	946	99.1	98.0	9.1	9.9	1.1	3.3	0.94
192	2017	ais0	66	747	1038	101.6	100.9	11.3	11.9	0.7	3.0	0.97
193	2018	ais0	52	830	1177	99.4	99.7	9.7	9.3	-0.3	2.8	0.96
194	2019	ais0	50	638	692	99.5	99.0	10.8	11.2	0.5	3.0	0.96
195	2020	ais0	35	191	259	99.2	99.4	7.9	7.2	-0.2	3.5	0.90
196	2010	ais1	165	206	491	91.9	94.0	9.3	9.1	-2.1	3.7	0.92
197	2011	ais1	168	249	539	95.3	96.5	9.5	10.0	-1.1	3.5	0.94
198	2012	ais1	169	241	440	97.1	98.5	9.4	9.4	-1.4	3.5	0.93
199	2013	ais1	122	343	571	97.5	98.3	9.2	9.0	-0.8	3.0	0.95
200	2014	ais1	85	524	759	97.9	97.8	10.6	10.8	0.1	3.0	0.96
201	2015	ais1	71	573	706	101.0	100.1	9.7	9.6	0.9	2.8	0.96
202	2016	ais1	70	553	792	97.6	97.1	11.0	11.0	0.5	3.1	0.96
203	2017	ais1	66	620	861	100.0	98.8	12.0	12.4	1.2	2.7	0.98
204	2018	ais1	52	508	742	100.4	99.8	11.3	10.6	0.6	3.3	0.96
205	2019	ais1	22	157	173	100.6	97.7	8.5	8.7	2.9	3.5	0.92
206	2010	ais2	165	147	363	93.6	95.5	8.8	8.4	-1.9	3.6	0.91
207	2011	ais2	167	182	393	96.3	97.8	9.8	9.4	-1.6	3.3	0.94
208	2012	ais2	169	178	329	97.4	99.0	9.4	9.0	-1.6	3.2	0.94
209	2013	ais2	121	257	431	97.4	98.1	9.0	8.7	-0.7	2.9	0.95
210	2014	ais2	84	394	566	98.6	99.2	10.6	10.3	-0.6	3.1	0.96
211	2015	ais2	71	429	550	99.8	99.2	9.3	9.0	0.6	2.6	0.96
212	2016	ais2	70	403	580	98.4	98.4	10.3	10.2	0.0	3.1	0.95
213	2017	ais2	65	365	504	99.1	98.5	10.5	10.4	0.6	2.8	0.96
214	2018	ais2	28	113	140	98.4	99.6	11.7	10.5	-1.2	3.1	0.97
215	2010	ais3	158	97	248	93.5	95.4	9.6	8.9	-1.9	3.5	0.93
216	2011	ais3	160	119	251	96.0	97.6	10.6	10.2	-1.6	3.4	0.95
217	2012	ais3	164	117	213	97.2	98.8	9.6	9.1	-1.6	3.3	0.94
218	2013	ais3	114	176	285	98.0	98.5	8.8	8.4	-0.4	3.0	0.94
219	2014	ais3	84	248	352	98.8	99.3	11.2	10.7	-0.5	3.0	0.96
220	2015	ais3	71	273	356	100.4	99.9	9.4	9.0	0.5	2.6	0.96
221	2016	ais3	67	208	312	98.6	98.5	10.4	10.1	0.0	3.1	0.95
222	2017	ais3	30	83	95	98.7	98.1	11.6	12.0	0.5	2.5	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
223	2010	ais	165	273	645	92.8	94.9	9.0	8.6	-2.1	3.5	0.92
224	2011	ais	168	339	721	95.7	97.2	10.0	9.9	-1.6	3.3	0.94
225	2012	ais	169	325	586	97.2	98.8	9.4	9.0	-1.6	3.2	0.94
226	2013	ais	122	457	752	97.4	98.0	9.0	8.6	-0.7	2.9	0.95
227	2014	ais	85	695	997	98.4	98.7	10.8	10.5	-0.3	2.8	0.97
228	2015	ais	71	771	937	100.5	99.8	9.3	8.9	0.6	2.5	0.96
229	2016	ais	70	740	1048	98.2	98.0	10.5	10.2	0.2	3.2	0.95
230	2017	ais	66	830	1147	99.4	98.6	10.6	10.6	0.8	2.7	0.97
231	2018	ais	52	886	1250	99.3	99.5	10.1	8.8	-0.2	3.6	0.94
232	2019	ais	50	644	699	102.5	99.5	6.9	6.6	2.9	3.8	0.85
233	2020	ais	35	191	259	101.2	100.5	7.8	5.9	0.6	3.9	0.87
234	2010	hst0	75	167	261	100.9	102.4	9.1	10.1	-1.6	3.9	0.92
235	2011	hst0	103	200	363	97.0	97.2	9.4	9.6	-0.2	3.7	0.92
236	2012	hst0	85	192	258	100.6	101.1	11.3	11.5	-0.5	4.0	0.94
237	2013	hst0	71	259	382	100.7	100.9	9.9	10.7	-0.2	3.4	0.95
238	2014	hst0	64	302	379	98.7	98.5	9.7	9.9	0.2	3.3	0.94
239	2015	hst0	55	293	348	99.5	99.5	10.1	10.9	0.1	3.4	0.95
240	2016	hst0	60	290	386	103.5	102.1	8.2	7.6	1.4	3.5	0.90
241	2017	hst0	56	326	397	101.6	101.1	8.4	9.1	0.5	3.8	0.91
242	2018	hst0	45	373	521	103.7	103.6	10.2	9.6	0.1	3.4	0.94
243	2019	hst0	41	247	289	104.4	102.7	9.1	10.1	1.7	4.4	0.90
244	2020	hst0	22	85	89	102.8	102.4	9.0	9.9	0.5	5.1	0.86
245	2010	hst1	74	148	226	100.7	102.4	8.7	8.9	-1.7	3.3	0.93
246	2011	hst1	101	176	316	96.9	97.6	9.4	9.7	-0.7	3.5	0.93
247	2012	hst1	84	170	226	98.3	99.6	10.1	10.1	-1.3	3.4	0.94
248	2013	hst1	71	228	334	100.5	101.0	10.4	10.4	-0.5	2.9	0.96
249	2014	hst1	64	271	336	97.7	97.7	8.5	8.9	0.0	3.0	0.94
250	2015	hst1	54	264	309	99.6	99.1	9.5	9.4	0.4	2.8	0.96
251	2016	hst1	60	250	329	102.3	101.9	8.3	8.2	0.4	3.9	0.89
252	2017	hst1	52	296	343	101.4	100.8	8.6	9.0	0.6	3.3	0.93
253	2018	hst1	35	277	330	103.2	103.1	10.3	9.7	0.1	3.9	0.92
254	2019	hst1	11	75	71	105.5	102.3	8.7	8.5	3.2	4.2	0.88
255	2010	hst2	71	102	160	103.5	103.9	8.4	8.2	-0.4	4.2	0.87
256	2011	hst2	89	136	230	99.0	100.1	11.6	11.3	-1.1	3.3	0.96
257	2012	hst2	83	122	164	98.0	99.1	12.1	11.4	-1.1	3.7	0.95
258	2013	hst2	68	171	249	102.7	103.0	10.1	10.0	-0.3	3.7	0.93
259	2014	hst2	62	201	241	99.3	98.7	11.5	11.4	0.6	2.9	0.97

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
260	2015	hst2	52	200	239	99.4	98.6	9.6	9.2	0.8	3.4	0.93
261	2016	hst2	53	193	233	101.0	100.9	11.1	11.3	0.1	3.2	0.96
262	2017	hst2	47	158	173	102.3	101.7	10.5	10.2	0.6	3.5	0.94
263	2018	hst2	15	53	49	102.7	102.7	9.1	8.2	0.1	3.2	0.94
264	2010	hst3	61	69	104	105.0	105.8	9.0	8.0	-0.8	4.5	0.87
265	2011	hst3	80	91	145	99.3	100.5	13.1	12.5	-1.2	3.6	0.96
266	2012	hst3	80	76	97	98.9	99.5	12.6	12.2	-0.7	3.7	0.96
267	2013	hst3	66	110	156	102.5	102.9	11.0	11.1	-0.4	3.5	0.95
268	2014	hst3	62	119	138	100.0	99.2	11.3	11.4	0.9	3.4	0.96
269	2015	hst3	44	135	149	99.2	99.1	8.3	8.6	0.1	3.4	0.92
270	2016	hst3	37	109	114	102.8	102.9	10.8	11.6	-0.1	3.6	0.95
271	2017	hst3	10	54	29	106.3	106.2	7.0	9.1	0.1	4.5	0.88
272	2010	hst	75	202	308	102.8	103.9	7.9	7.7	-1.1	3.6	0.89
273	2011	hst	104	241	434	98.5	99.5	10.4	10.3	-1.0	3.1	0.96
274	2012	hst	85	233	310	98.4	99.4	11.2	10.6	-1.0	3.2	0.96
275	2013	hst	71	314	454	101.9	102.2	10.1	10.1	-0.4	3.0	0.96
276	2014	hst	65	363	451	99.0	98.5	9.9	10.0	0.5	2.8	0.96
277	2015	hst	55	353	411	99.7	98.9	8.5	8.5	0.8	3.0	0.94
278	2016	hst	62	331	447	101.6	101.1	9.2	9.4	0.5	3.4	0.93
279	2017	hst	56	377	458	101.3	100.8	8.8	8.9	0.6	3.2	0.94
280	2018	hst	45	407	563	101.5	101.7	8.9	8.0	-0.2	3.9	0.90
281	2019	hst	41	250	293	104.1	102.6	6.6	6.6	1.4	4.4	0.77
282	2020	hst	22	85	89	102.8	101.5	9.9	7.3	1.2	6.9	0.72
283	2010	fert	165	218	519	92.4	95.1	9.4	8.9	-2.6	3.4	0.93
284	2011	fert	168	265	571	95.1	96.8	9.8	9.9	-1.7	3.1	0.95
285	2012	fert	169	256	465	97.0	98.6	9.8	9.4	-1.7	3.0	0.95
286	2013	fert	122	364	605	97.6	98.5	9.1	8.6	-0.9	2.8	0.95
287	2014	fert	85	553	800	97.8	97.9	9.7	9.5	-0.1	2.7	0.96
288	2015	fert	71	606	747	100.6	99.5	10.1	10.0	1.1	2.5	0.97
289	2016	fert	70	584	835	98.5	97.8	10.3	10.3	0.7	2.7	0.97
290	2017	fert	66	647	899	100.7	99.6	10.9	11.0	1.1	2.3	0.98
291	2018	fert	52	522	759	100.7	100.3	10.3	9.4	0.4	3.5	0.94
292	2019	fert	22	166	178	101.7	97.8	8.9	8.6	3.9	3.4	0.92
293	2010	interval	165	218	519	93.4	95.6	9.7	9.2	-2.3	3.5	0.93
294	2011	interval	168	265	571	95.5	97.0	10.2	10.2	-1.5	2.8	0.96
295	2012	interval	169	256	465	96.5	98.0	10.1	9.6	-1.4	2.8	0.96
296	2013	interval	122	364	605	98.5	99.0	9.6	9.3	-0.6	2.5	0.97

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
297	2014	interval	85	553	800	97.6	97.5	9.2	9.1	0.0	2.5	0.96
298	2015	interval	71	606	747	100.2	98.9	10.8	10.8	1.3	2.4	0.98
299	2016	interval	70	584	835	98.4	97.9	9.4	9.2	0.6	2.4	0.97
300	2017	interval	66	647	899	100.4	99.5	10.7	10.6	0.9	2.3	0.98
301	2018	interval	52	522	759	101.2	100.6	9.7	9.1	0.6	3.4	0.94
302	2019	interval	22	166	178	101.8	98.5	8.1	7.7	3.3	3.5	0.91

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

Obs	diff	d_cr	d_nrr	d_icf	d_ifl	d_ais	d_hst	d_fert
1	-14	.	1	1	.	.	.	.
2	-13	1	.	.	.	.	.	.
3	-12	1	.	.	.	1	.	.
4	-11	4	4	.	1	2	.	.
5	-10	8	10	.	7	3	2	5
6	-9	10	11	3	12	13	6	10
7	-8	16	18	7	12	10	4	18
8	-7	27	19	8	22	27	13	13
9	-6	29	36	9	39	29	16	30
10	-5	57	54	29	44	50	30	56
11	-4	80	53	39	72	68	41	63
12	-3	80	103	57	91	72	45	90
13	-2	115	114	110	92	122	76	95
14	-1	112	129	166	143	149	75	140
15	0	132	115	159	141	139	93	133
16	1	117	100	148	123	128	84	129
17	2	89	94	99	92	68	55	73
18	3	54	70	65	53	66	46	48
19	4	35	44	32	30	41	34	35
20	5	26	19	25	31	24	21	20
21	6	15	21	18	14	21	11	14
22	7	11	16	5	13	6	10	10
23	8	7	12	8	7	4	8	2
24	9	8	4	1	7	5	4	4
25	10	4	1	1	3	3	5	2
26	11	.	2	.	2	1	1	.
27	12	.	2	.	1	1	.	.
28	13	.	.	.	.	.	1	.
29	14	1	.	.	.	.	.	.
30	15	1	.	.	1	.	.	.
31	16	.	1	.	.	.	.	.

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

Obs	diff	p_cr	p_nrr	p_icf	p_ifl	p_ais	p_hst	p_fert
1	-14	.	0	0	.	.	.	.
2	-13	0	.	.	.	.	.	.
3	-12	0	.	.	.	0	.	.
4	-11	0	0	.	0	0	.	.
5	-10	1	1	.	1	0	0	1
6	-9	1	1	0	1	1	1	1
7	-8	2	2	1	1	1	1	2
8	-7	3	2	1	2	3	2	1
9	-6	3	3	1	4	3	2	3
10	-5	5	5	3	4	5	4	6
11	-4	8	5	4	7	6	6	6
12	-3	8	10	6	9	7	7	9
13	-2	11	11	11	9	12	11	10
14	-1	11	12	17	14	14	11	14
15	0	13	11	16	13	13	14	13
16	1	11	9	15	12	12	12	13
17	2	9	9	10	9	6	8	7
18	3	5	7	7	5	6	7	5
19	4	3	4	3	3	4	5	4
20	5	3	2	3	3	2	3	2
21	6	1	2	2	1	2	2	1
22	7	1	2	1	1	1	1	1
23	8	1	1	1	1	0	1	0
24	9	1	0	0	1	0	1	0
25	10	0	0	0	0	0	1	0
26	11	.	0	.	0	0	0	.
27	12	.	0	.	0	0	.	.
28	13	.	.	.	.	.	0	.
29	14	0	.	.	.	.	.	.
30	15	0	.	.	0	.	.	.
31	16	.	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	fert	6611	98.9	98.5	8.9	7.0	0.4	3.7	0.92
2	2020	fert	7281	102.0	101.0	8.8	7.0	1.0	3.6	0.92
3	2021	fert	13981	101.6	100.3	7.9	6.0	1.3	3.8	0.88
4	2022	fert	24684	103.2	101.6	7.5	5.8	1.6	3.7	0.88
5	2023	fert	20637	104.1	102.1	7.0	5.3	2.0	3.7	0.86
6	2024	fert	887	104.9	102.9	6.7	4.9	2.0	3.8	0.84

RDC SS and twostep breeding value for genotyped females without phenotype

Obs	diff	d_fert	p_fert
1	-14	4	0
2	-13	5	0
3	-12	21	0
4	-11	29	0
5	-10	86	0
6	-9	164	0
7	-8	321	0
8	-7	610	1
9	-6	1132	2
10	-5	1705	2
11	-4	2644	4
12	-3	3883	5
13	-2	5013	7
14	-1	6170	8
15	0	7281	10
16	1	7806	11
17	2	7887	11
18	3	7302	10
19	4	6321	9
20	5	5145	7
21	6	3941	5
22	7	2637	4
23	8	1777	2
24	9	1077	1
25	10	575	1
26	11	295	0
27	12	137	0
28	13	66	0
29	14	34	0
30	15	9	0
31	16	3	0
32	17	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	fert	8045	97.4	98.3	8.5	7.0	-0.9	3.5	0.92
2	2016	fert	11083	97.6	98.3	8.4	6.9	-0.8	3.5	0.91
3	2017	fert	12896	97.5	97.7	8.5	7.0	-0.2	3.5	0.92
4	2018	fert	14548	99.4	99.2	8.2	6.8	0.2	3.4	0.91
5	2019	fert	14753	99.9	99.2	8.9	7.3	0.7	3.5	0.93
6	2020	fert	16428	103.1	101.9	8.5	7.1	1.2	3.4	0.92
7	2021	fert	9989	102.1	100.9	7.8	6.2	1.2	3.7	0.88
8	2022	fert	10	.	.	.	.	.	.	0.85

RDC SS and twostep breeding value for genotyped females with phenotype

Obs	diff	d_fert	p_fert
1	-19	1	0
2	-15	1	0
3	-14	2	0
4	-13	13	0
5	-12	33	0
6	-11	82	0
7	-10	181	0
8	-9	365	0
9	-8	715	1
10	-7	1259	1
11	-6	2149	2
12	-5	3254	4
13	-4	4699	5
14	-3	6306	7
15	-2	7976	9
16	-1	9045	10
17	0	9713	11
18	1	9576	11
19	2	8869	10
20	3	7305	8
21	4	5781	7
22	5	4222	5
23	6	2726	3
24	7	1588	2
25	8	951	1
26	9	505	1
27	10	252	0
28	11	119	0
29	12	40	0
30	13	16	0
31	14	6	0
32	15	2	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	fert	165	218	519	92.4	95.7	9.4	8.2	-3.2	2.7	0.96
2	2011	fert	168	265	571	95.1	97.2	9.8	8.8	-2.2	2.5	0.97
3	2012	fert	169	256	465	97.0	98.8	9.8	8.8	-1.8	2.4	0.97
4	2013	fert	122	364	605	97.6	98.9	9.1	7.9	-1.3	2.5	0.97
5	2014	fert	85	553	800	97.8	98.3	9.7	9.1	-0.5	2.2	0.98
6	2015	fert	71	606	747	100.6	100.2	10.1	9.5	0.4	2.0	0.98
7	2016	fert	70	584	835	98.5	98.5	10.3	9.7	0.1	1.9	0.98
8	2017	fert	66	647	899	100.7	99.7	10.9	10.3	1.0	2.2	0.98
9	2018	fert	52	522	759	100.7	100.6	10.3	8.8	0.1	3.3	0.95
10	2019	fert	22	166	178	101.7	99.6	8.9	7.1	2.2	3.8	0.91

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

Obs	diff	d_fert	p_fert
1	.	1	.
2	-11	2	0
3	-10	2	0
4	-9	5	1
5	-8	11	1
6	-7	23	2
7	-6	28	3
8	-5	54	5
9	-4	79	8
10	-3	96	10
11	-2	139	14
12	-1	160	16
13	0	131	13
14	1	115	12
15	2	75	8
16	3	30	3
17	4	21	2
18	5	9	1
19	6	4	0
20	7	3	0
21	8	1	0
22	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	fert	37	.	.	102.2	101.1	8.0	7.1	1.1	3.1	0.92
2	2020	fert	74	.	.	103.9	102.2	7.1	5.8	1.7	3.3	0.89
3	2021	fert	72	.	.	106.1	103.6	7.2	5.2	2.5	3.6	0.88
4	2022	fert	73	.	.	104.7	103.2	7.5	5.6	1.5	3.9	0.86
5	2023	fert	50	.	.	105.2	103.6	6.3	4.0	1.6	4.0	0.78
6	2024	fert	3	.	.	105.0	101.8	3.6	5.4	4.7	1.8	1.00

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

Obs	diff	d_fert	p_fert
1	.	1	.
2	-11	1	0
3	-8	1	0
4	-7	2	1
5	-6	5	2
6	-5	8	3
7	-4	6	2
8	-3	7	2
9	-2	20	6
10	-1	30	10
11	0	27	9
12	1	39	13
13	2	33	11
14	3	39	13
15	4	22	7
16	5	22	7
17	6	15	5
18	7	12	4
19	8	11	4
20	9	5	2
21	10	2	1
22	14	1	0

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	fert	2841	102.6	101.5	8.3	6.4	1.1	3.6	0.91
2	2021	fert	2788	102.4	100.9	8.0	5.9	1.5	4.0	0.88
3	2022	fert	2590	104.3	102.4	7.5	5.9	1.8	3.6	0.88
4	2023	fert	2260	104.9	102.8	6.7	5.0	2.1	3.7	0.84
5	2024	fert	147	106.6	104.0	6.7	5.2	2.7	3.7	0.83

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

Obs	diff	d_fert	p_fert
1	-14	1	0
2	-13	2	0
3	-12	1	0
4	-11	5	0
5	-10	6	0
6	-9	26	0
7	-8	44	0
8	-7	77	1
9	-6	137	1
10	-5	261	2
11	-4	358	3
12	-3	510	5
13	-2	731	7
14	-1	875	8
15	0	1018	10
16	1	1099	10
17	2	1137	11
18	3	1080	10
19	4	931	9
20	5	734	7
21	6	559	5
22	7	379	4
23	8	288	3
24	9	190	2
25	10	96	1
26	11	45	0
27	12	17	0
28	13	16	0
29	14	3	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	cr0	165	261	620	94.0	94.1	9.1	8.9	-0.1	1.5	0.99
2	2011	cr0	168	323	692	95.3	95.3	8.9	8.9	0.0	1.5	0.99
3	2012	cr0	169	309	560	99.7	99.7	8.3	8.3	0.0	1.7	0.98
4	2013	cr0	122	436	725	98.5	98.5	9.3	9.0	0.0	1.9	0.98
5	2014	cr0	85	665	955	99.0	99.3	11.5	11.1	-0.3	2.1	0.98
6	2015	cr0	71	735	898	102.6	103.9	10.3	9.4	-1.3	2.4	0.97
7	2016	cr0	70	710	1010	101.0	101.6	9.2	6.5	-0.5	7.1	0.64
8	2017	cr0	66	797	1103	104.7	104.3	11.1	5.9	0.4	8.8	0.62
9	2018	cr0	52	863	1218	102.8	102.4	9.9	5.6	0.4	7.6	0.66
10	2019	cr0	49	555	620	104.7	105.0	11.1	5.7	-0.4	9.1	0.58
11	2020	cr0	23	100	121	104.1	103.5	7.6	4.7	0.7	6.1	0.60
12	2010	cr1	165	216	513	90.0	90.1	8.6	8.6	-0.1	1.1	0.99
13	2011	cr1	168	262	564	94.0	94.0	9.3	9.4	0.1	1.3	0.99
14	2012	cr1	169	252	459	96.8	96.8	9.1	9.2	0.0	1.4	0.99
15	2013	cr1	122	358	597	97.3	97.5	9.0	9.0	-0.3	1.6	0.98
16	2014	cr1	85	545	789	98.9	99.3	9.8	9.7	-0.4	1.7	0.98
17	2015	cr1	71	595	734	102.4	103.9	9.5	9.7	-1.5	2.1	0.98
18	2016	cr1	70	575	825	101.0	101.0	10.4	8.0	0.0	7.2	0.72
19	2017	cr1	66	632	874	103.9	103.5	11.2	7.2	0.4	8.1	0.69
20	2018	cr1	51	453	669	104.7	103.2	11.0	7.5	1.5	7.7	0.72
21	2019	cr1	15	107	101	102.1	104.1	9.9	7.1	-2.0	10.3	0.30
22	2010	cr2	165	154	378	90.8	90.8	8.1	8.1	-0.1	1.0	0.99
23	2011	cr2	168	188	408	94.5	94.5	9.2	9.3	0.0	1.1	0.99
24	2012	cr2	169	186	342	96.8	96.7	9.2	9.2	0.0	1.3	0.99
25	2013	cr2	122	265	446	97.3	97.6	8.6	8.6	-0.2	1.4	0.99
26	2014	cr2	84	410	590	99.0	99.4	9.8	9.7	-0.3	1.5	0.99
27	2015	cr2	71	447	571	101.8	103.4	9.1	9.1	-1.5	2.2	0.97
28	2016	cr2	70	411	595	101.1	100.8	10.1	8.0	0.3	6.9	0.73
29	2017	cr2	64	323	441	103.2	102.9	10.7	7.1	0.3	7.4	0.72
30	2018	cr2	19	70	73	105.7	103.6	12.2	9.1	2.1	8.0	0.76
31	2010	cr3	159	101	258	91.0	91.1	8.3	8.4	0.0	0.9	0.99
32	2011	cr3	162	122	260	94.9	94.9	9.5	9.6	0.0	1.1	0.99
33	2012	cr3	165	122	220	96.5	96.6	9.2	9.2	0.0	1.2	0.99
34	2013	cr3	116	181	296	97.7	97.8	8.2	8.2	-0.1	1.3	0.99
35	2014	cr3	84	258	366	99.2	99.5	9.8	9.8	-0.3	1.4	0.99
36	2015	cr3	71	278	360	101.7	103.0	8.9	9.0	-1.3	2.1	0.97
37	2016	cr3	61	200	296	101.9	101.0	9.5	7.5	0.8	7.1	0.67

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	2017	cr3	19	60	61	101.5	100.2	12.0	7.8	1.3	8.3	0.72
39	2010	cr	165	279	658	90.4	90.4	8.4	8.5	-0.1	1.0	0.99
40	2011	cr	168	347	739	94.2	94.2	9.5	9.6	0.0	1.1	0.99
41	2012	cr	169	332	598	96.6	96.7	9.3	9.4	0.0	1.3	0.99
42	2013	cr	122	467	768	97.1	97.4	8.7	8.8	-0.3	1.4	0.99
43	2014	cr	85	711	1016	99.0	99.4	10.0	9.9	-0.4	1.5	0.99
44	2015	cr	71	785	952	102.0	103.5	9.2	9.4	-1.5	2.1	0.97
45	2016	cr	70	754	1067	101.2	100.9	10.3	8.2	0.3	7.2	0.72
46	2017	cr	66	843	1160	103.4	103.1	10.7	7.1	0.3	7.4	0.72
47	2018	cr	52	886	1248	103.9	102.6	10.6	7.6	1.3	7.1	0.74
48	2019	cr	49	556	622	107.0	106.2	8.4	6.6	0.7	6.2	0.68
49	2020	cr	23	100	121	107.4	105.4	8.8	6.7	2.0	4.9	0.83
50	2010	nrr0	165	247	588	97.4	97.8	8.1	7.6	-0.3	2.0	0.97
51	2011	nrr0	168	303	649	98.3	98.4	8.9	8.8	0.0	1.7	0.98
52	2012	nrr0	169	293	530	101.5	101.3	8.7	8.8	0.2	2.1	0.97
53	2013	nrr0	122	412	683	100.3	100.3	9.0	8.7	0.1	2.1	0.97
54	2014	nrr0	85	628	906	100.3	100.3	11.8	11.7	0.1	2.6	0.98
55	2015	nrr0	71	698	858	102.6	103.1	10.5	10.1	-0.5	2.6	0.97
56	2016	nrr0	70	674	963	101.0	102.0	9.0	6.1	-1.0	7.4	0.59
57	2017	nrr0	66	758	1055	103.0	103.9	10.6	6.6	-1.0	8.3	0.62
58	2018	nrr0	52	840	1192	99.8	101.0	9.4	5.9	-1.2	8.1	0.52
59	2019	nrr0	50	637	692	100.7	104.0	11.1	6.8	-3.3	9.2	0.56
60	2020	nrr0	35	191	259	101.2	101.1	7.8	5.3	0.1	6.3	0.60
61	2010	nrr1	165	208	496	93.2	93.5	8.8	8.8	-0.2	1.4	0.99
62	2011	nrr1	168	252	544	96.1	96.1	10.2	10.3	0.0	1.5	0.99
63	2012	nrr1	169	243	443	98.4	98.1	9.3	9.4	0.3	1.7	0.98
64	2013	nrr1	122	346	576	98.7	98.5	8.0	8.4	0.2	2.0	0.97
65	2014	nrr1	85	528	765	100.1	100.0	10.3	10.5	0.0	2.3	0.97
66	2015	nrr1	71	578	711	102.3	102.7	9.0	9.2	-0.4	2.2	0.97
67	2016	nrr1	70	558	799	101.0	101.1	10.8	8.6	-0.1	8.2	0.66
68	2017	nrr1	66	624	867	102.0	102.8	10.6	7.1	-0.8	8.7	0.59
69	2018	nrr1	52	517	752	102.3	101.4	10.0	6.6	0.8	8.4	0.55
70	2019	nrr1	22	178	184	101.8	106.4	7.9	7.8	-4.5	6.9	0.61
71	2010	nrr2	165	149	366	93.0	93.0	8.7	8.8	0.0	1.2	0.99
72	2011	nrr2	168	182	395	95.5	95.2	10.6	10.7	0.3	1.4	0.99
73	2012	nrr2	169	180	331	97.7	97.4	9.2	9.2	0.3	1.7	0.98
74	2013	nrr2	122	257	433	97.0	97.0	8.6	8.7	-0.1	1.9	0.98

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	2014	nrr2	84	397	571	99.9	99.5	11.6	11.6	0.4	2.0	0.99
76	2015	nrr2	71	432	554	100.7	100.9	9.4	9.7	-0.2	2.7	0.96
77	2016	nrr2	70	406	584	100.6	100.1	11.9	9.4	0.5	8.3	0.72
78	2017	nrr2	65	372	513	100.8	100.8	10.6	7.7	0.0	7.4	0.72
79	2018	nrr2	31	119	155	100.3	100.0	12.6	8.4	0.3	10.0	0.61
80	2010	nrr3	158	98	250	92.8	92.9	9.5	9.6	-0.1	1.2	0.99
81	2011	nrr3	160	120	254	95.8	95.7	11.3	11.4	0.1	1.1	1.00
82	2012	nrr3	165	118	214	97.9	97.8	9.6	9.6	0.1	1.4	0.99
83	2013	nrr3	114	177	287	97.9	97.7	8.4	8.3	0.2	1.5	0.98
84	2014	nrr3	84	250	354	100.2	100.1	11.6	11.8	0.1	1.7	0.99
85	2015	nrr3	71	275	358	101.6	101.8	9.6	9.7	-0.2	2.2	0.97
86	2016	nrr3	67	211	316	100.1	99.6	11.3	9.0	0.6	8.3	0.68
87	2017	nrr3	32	91	106	100.0	99.9	11.9	8.2	0.1	7.5	0.78
88	2010	nrr	165	275	647	92.9	93.0	8.8	8.9	-0.1	1.1	0.99
89	2011	nrr	168	341	724	95.6	95.6	10.5	10.7	0.1	1.2	0.99
90	2012	nrr	169	326	588	98.0	97.8	9.2	9.3	0.2	1.5	0.99
91	2013	nrr	122	459	756	97.6	97.6	8.1	8.2	0.1	1.7	0.98
92	2014	nrr	85	698	1001	100.1	100.0	11.0	11.3	0.1	1.8	0.99
93	2015	nrr	71	774	941	101.5	101.8	9.1	9.3	-0.3	2.2	0.97
94	2016	nrr	70	742	1053	100.6	100.2	11.2	8.8	0.4	8.2	0.69
95	2017	nrr	66	833	1153	101.4	101.9	10.2	7.2	-0.5	7.1	0.71
96	2018	nrr	52	890	1258	101.5	100.7	10.3	7.1	0.9	8.2	0.61
97	2019	nrr	50	643	700	104.0	104.9	7.4	6.1	-0.8	5.0	0.73
98	2020	nrr	35	191	259	103.5	102.1	7.0	6.4	1.5	4.1	0.82
99	2010	icf1	165	210	500	97.1	97.1	8.9	8.8	0.0	1.2	0.99
100	2011	icf1	168	254	548	97.7	97.7	9.9	10.0	-0.1	1.3	0.99
101	2012	icf1	169	245	447	97.6	97.9	9.1	8.8	-0.3	1.3	0.99
102	2013	icf1	122	349	582	100.2	100.6	8.9	8.8	-0.4	1.2	0.99
103	2014	icf1	85	532	772	98.0	98.6	8.6	8.6	-0.6	1.7	0.98
104	2015	icf1	71	583	718	99.7	100.0	10.7	10.6	-0.3	2.0	0.98
105	2016	icf1	70	563	806	98.7	98.4	8.1	6.9	0.4	5.9	0.70
106	2017	icf1	66	630	875	99.9	99.3	9.6	7.3	0.5	6.7	0.72
107	2018	icf1	52	519	754	101.7	100.8	9.6	6.4	0.9	6.0	0.80
108	2019	icf1	22	166	178	100.1	98.4	6.8	7.6	1.8	4.3	0.82
109	2010	icf2	165	150	370	98.3	98.2	10.1	9.9	0.1	1.1	0.99
110	2011	icf2	168	184	399	98.7	98.7	11.0	11.1	0.0	1.2	0.99
111	2012	icf2	169	182	335	98.2	98.4	10.3	10.2	-0.3	1.2	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
112	2013	icf2	122	260	438	101.3	101.6	9.9	9.9	-0.4	1.3	0.99
113	2014	icf2	84	401	577	98.2	98.7	10.8	10.8	-0.5	1.6	0.99
114	2015	icf2	71	437	560	100.5	101.1	11.7	11.7	-0.6	1.8	0.99
115	2016	icf2	70	410	591	98.7	98.1	9.2	8.4	0.6	6.1	0.76
116	2017	icf2	65	373	513	100.6	100.1	10.4	8.6	0.5	7.0	0.74
117	2018	icf2	28	118	146	104.2	101.0	8.6	7.5	3.2	4.4	0.86
118	2010	icf3	159	99	252	98.7	98.7	10.5	10.4	0.0	1.1	0.99
119	2011	icf3	160	121	257	99.0	98.9	11.2	11.2	0.0	1.2	0.99
120	2012	icf3	165	119	217	97.8	98.0	10.3	10.1	-0.2	1.1	0.99
121	2013	icf3	115	178	291	101.6	102.0	10.6	10.5	-0.4	1.2	0.99
122	2014	icf3	84	254	359	98.9	99.3	11.0	11.0	-0.4	1.4	0.99
123	2015	icf3	71	279	363	100.1	100.8	11.9	12.0	-0.7	1.9	0.99
124	2016	icf3	67	214	320	99.5	98.6	9.3	8.4	0.9	6.1	0.77
125	2017	icf3	31	84	99	100.3	99.0	9.4	7.9	1.3	7.7	0.62
126	2010	icf	165	218	519	97.9	97.9	9.8	9.7	0.0	1.1	0.99
127	2011	icf	168	265	571	98.3	98.4	10.6	10.7	-0.1	1.2	0.99
128	2012	icf	169	256	465	97.8	98.2	9.7	9.5	-0.3	1.2	0.99
129	2013	icf	122	364	605	101.1	101.5	9.7	9.6	-0.4	1.2	0.99
130	2014	icf	85	553	800	98.4	98.8	10.0	10.0	-0.4	1.4	0.99
131	2015	icf	71	606	747	100.1	100.6	11.3	11.2	-0.5	1.9	0.99
132	2016	icf	70	584	835	99.0	98.3	8.6	7.7	0.7	5.8	0.75
133	2017	icf	66	647	899	100.3	99.9	9.9	8.3	0.4	6.5	0.76
134	2018	icf	52	522	759	101.8	100.4	9.2	6.6	1.3	5.1	0.84
135	2019	icf	22	166	178	100.8	99.0	7.6	8.0	1.8	4.4	0.84
136	2010	ifl0	165	237	565	96.8	96.9	9.9	9.6	-0.2	1.9	0.98
137	2011	ifl0	168	291	624	97.9	97.9	8.9	8.9	0.0	1.8	0.98
138	2012	ifl0	169	282	512	101.4	101.4	8.4	8.5	0.0	2.1	0.97
139	2013	ifl0	122	397	660	99.4	99.7	9.2	8.8	-0.3	2.2	0.97
140	2014	ifl0	85	603	869	99.9	100.0	11.9	11.4	-0.1	2.3	0.98
141	2015	ifl0	71	674	827	102.6	103.1	11.1	10.1	-0.6	2.9	0.97
142	2016	ifl0	70	648	926	101.0	102.6	10.3	6.4	-1.6	7.6	0.68
143	2017	ifl0	66	733	1021	103.3	103.7	10.6	6.0	-0.4	8.0	0.66
144	2018	ifl0	52	814	1158	101.2	102.8	10.5	5.5	-1.6	8.3	0.62
145	2019	ifl0	50	621	673	102.4	104.0	11.6	5.9	-1.6	9.4	0.59
146	2020	ifl0	35	189	255	102.3	102.5	7.6	5.4	-0.2	6.2	0.59
147	2010	ifl1	165	209	498	92.8	93.0	9.4	9.3	-0.2	1.3	0.99
148	2011	ifl1	168	253	545	96.1	96.2	9.5	9.7	-0.1	1.5	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
149	2012	ifl1	169	244	444	97.9	97.8	9.6	9.6	0.0	1.5	0.99
150	2013	ifl1	122	348	580	98.8	99.2	9.4	9.3	-0.4	1.7	0.98
151	2014	ifl1	85	530	768	98.8	99.1	9.2	9.2	-0.3	2.0	0.98
152	2015	ifl1	71	581	715	102.1	102.8	10.4	10.5	-0.7	2.0	0.98
153	2016	ifl1	70	559	801	99.7	100.1	10.5	8.5	-0.3	7.3	0.73
154	2017	ifl1	66	628	873	102.2	102.4	11.1	7.4	-0.3	8.1	0.69
155	2018	ifl1	52	521	759	102.5	102.2	10.5	7.1	0.4	7.3	0.72
156	2019	ifl1	22	181	186	102.4	104.5	8.4	8.3	-2.1	7.4	0.60
157	2010	ifl2	165	150	368	94.2	94.3	8.8	8.9	0.0	1.1	0.99
158	2011	ifl2	168	183	397	96.7	96.7	9.6	9.5	0.0	1.2	0.99
159	2012	ifl2	169	181	333	98.1	98.0	9.6	9.5	0.1	1.3	0.99
160	2013	ifl2	122	259	436	98.9	99.1	9.0	9.1	-0.2	1.6	0.98
161	2014	ifl2	84	399	574	99.2	99.2	9.4	9.4	0.0	1.4	0.99
162	2015	ifl2	71	435	557	101.4	102.1	9.3	9.4	-0.6	1.9	0.98
163	2016	ifl2	70	409	588	100.0	99.9	9.9	8.5	0.1	6.8	0.74
164	2017	ifl2	65	375	518	101.6	101.6	10.3	7.1	0.0	7.0	0.73
165	2018	ifl2	31	120	156	102.2	101.5	10.2	7.6	0.6	7.6	0.67
166	2010	ifl3	159	98	251	94.7	94.8	9.3	9.4	-0.1	1.0	0.99
167	2011	ifl3	160	121	256	97.2	97.1	9.7	9.6	0.0	1.1	0.99
168	2012	ifl3	165	119	216	98.2	98.2	9.7	9.6	0.0	1.3	0.99
169	2013	ifl3	115	178	289	99.5	99.8	8.9	8.9	-0.3	1.4	0.99
170	2014	ifl3	84	253	358	99.5	99.7	9.3	9.4	-0.2	1.3	0.99
171	2015	ifl3	71	278	362	101.7	102.5	9.3	9.4	-0.8	1.9	0.98
172	2016	ifl3	67	215	321	100.2	100.1	10.0	8.3	0.1	7.2	0.70
173	2017	ifl3	32	93	108	101.0	100.1	11.4	7.5	1.0	8.1	0.70
174	2010	ifl	165	272	641	93.8	93.9	9.2	9.3	-0.1	1.1	0.99
175	2011	ifl	168	337	719	96.5	96.5	9.7	9.8	0.0	1.2	0.99
176	2012	ifl	169	323	584	98.1	98.0	9.8	9.7	0.1	1.4	0.99
177	2013	ifl	122	455	749	99.0	99.3	9.1	9.1	-0.3	1.5	0.99
178	2014	ifl	85	692	992	99.2	99.4	9.3	9.4	-0.2	1.4	0.99
179	2015	ifl	71	766	932	101.8	102.6	9.7	9.8	-0.7	1.7	0.98
180	2016	ifl	70	735	1042	100.0	100.0	10.2	8.5	0.0	7.1	0.72
181	2017	ifl	66	826	1143	102.1	102.1	10.5	7.2	0.0	7.2	0.73
182	2018	ifl	52	875	1238	102.3	101.9	9.9	7.0	0.4	6.9	0.72
183	2019	ifl	50	628	681	105.8	105.3	7.5	6.4	0.5	5.7	0.68
184	2020	ifl	35	189	255	106.0	104.4	6.9	5.9	1.6	3.8	0.84
185	2010	ais0	165	243	578	97.2	97.4	8.9	8.7	-0.2	1.8	0.98

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
186	2011	ais0	168	297	636	98.4	98.4	8.9	8.9	0.0	1.6	0.98
187	2012	ais0	169	287	520	101.3	101.1	8.4	8.5	0.2	1.9	0.97
188	2013	ais0	122	404	671	100.1	99.9	8.8	8.6	0.2	1.9	0.98
189	2014	ais0	85	617	890	99.6	99.3	11.8	11.5	0.3	2.2	0.98
190	2015	ais0	71	688	843	102.2	101.9	10.6	10.0	0.3	2.5	0.97
191	2016	ais0	70	662	946	99.6	100.7	8.9	6.6	-1.2	7.0	0.63
192	2017	ais0	66	747	1038	101.9	102.3	11.1	6.6	-0.4	8.1	0.69
193	2018	ais0	52	830	1177	100.0	100.7	9.6	6.4	-0.8	7.2	0.66
194	2019	ais0	50	638	692	100.0	102.8	10.6	6.7	-2.7	8.3	0.62
195	2020	ais0	35	191	259	99.6	99.8	7.8	5.6	-0.2	5.7	0.69
196	2010	ais1	165	206	491	92.9	93.1	9.2	9.1	-0.1	1.5	0.99
197	2011	ais1	168	249	539	96.4	96.3	9.5	9.7	0.1	1.5	0.99
198	2012	ais1	169	241	440	98.1	97.9	9.4	9.3	0.2	1.6	0.99
199	2013	ais1	122	343	571	98.5	98.8	9.2	9.2	-0.3	1.6	0.98
200	2014	ais1	85	524	759	98.8	98.8	10.6	10.9	0.0	2.0	0.98
201	2015	ais1	71	573	706	102.0	101.8	9.7	9.9	0.1	2.2	0.97
202	2016	ais1	70	553	792	98.6	99.3	11.0	8.8	-0.7	7.5	0.74
203	2017	ais1	66	620	861	101.0	101.3	12.0	7.2	-0.3	8.8	0.69
204	2018	ais1	52	508	742	101.4	100.5	11.3	7.8	0.9	8.1	0.69
205	2019	ais1	22	157	173	101.6	103.8	8.5	8.5	-2.2	7.7	0.59
206	2010	ais2	165	147	363	94.6	94.6	8.6	8.5	0.0	1.1	0.99
207	2011	ais2	167	182	393	97.1	96.9	9.6	9.6	0.2	1.2	0.99
208	2012	ais2	169	178	329	98.3	98.0	9.2	9.2	0.2	1.4	0.99
209	2013	ais2	121	257	431	98.2	98.3	8.8	8.7	-0.1	1.5	0.98
210	2014	ais2	84	394	566	99.3	99.2	10.3	10.4	0.2	1.7	0.99
211	2015	ais2	71	429	550	100.5	100.5	9.1	9.3	0.1	2.0	0.98
212	2016	ais2	70	403	580	99.2	99.0	10.2	8.7	0.2	7.2	0.72
213	2017	ais2	65	365	504	99.9	99.7	10.2	6.8	0.2	7.1	0.71
214	2018	ais2	28	113	140	99.1	98.4	11.3	8.0	0.7	8.6	0.65
215	2010	ais3	158	97	248	94.5	94.6	9.3	9.4	-0.1	1.0	0.99
216	2011	ais3	160	119	251	96.9	96.7	10.4	10.3	0.1	1.2	0.99
217	2012	ais3	164	117	213	98.1	97.9	9.3	9.3	0.2	1.4	0.99
218	2013	ais3	114	176	285	98.9	98.9	8.6	8.5	0.0	1.4	0.99
219	2014	ais3	84	248	352	99.7	99.3	10.8	10.9	0.4	1.7	0.99
220	2015	ais3	71	273	356	101.2	101.3	9.1	9.3	-0.1	1.9	0.98
221	2016	ais3	67	208	312	99.3	98.7	10.0	8.6	0.6	7.6	0.68
222	2017	ais3	30	83	95	99.5	97.9	11.4	7.5	1.6	7.9	0.72

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
223	2010	ais	165	273	645	93.9	94.0	8.9	8.8	-0.1	1.1	0.99
224	2011	ais	168	339	721	96.6	96.5	9.8	9.8	0.1	1.3	0.99
225	2012	ais	169	325	586	98.1	97.9	9.3	9.2	0.2	1.4	0.99
226	2013	ais	122	457	752	98.3	98.5	8.8	8.8	-0.2	1.4	0.99
227	2014	ais	85	695	997	99.3	99.1	10.5	10.6	0.2	1.7	0.99
228	2015	ais	71	771	937	101.3	101.2	9.1	9.3	0.1	1.8	0.98
229	2016	ais	70	740	1048	99.1	99.0	10.3	8.6	0.1	7.4	0.71
230	2017	ais	66	830	1147	100.3	100.2	10.3	6.9	0.1	7.2	0.72
231	2018	ais	52	886	1250	100.3	99.3	9.9	7.2	1.0	7.0	0.70
232	2019	ais	50	644	699	103.3	103.1	6.8	6.2	0.2	5.4	0.66
233	2020	ais	35	191	259	101.9	100.2	7.7	6.2	1.7	4.6	0.80
234	2010	hst0	75	167	261	101.6	101.7	9.2	9.4	-0.2	2.5	0.97
235	2011	hst0	103	200	363	97.8	97.8	9.5	9.4	0.0	2.4	0.97
236	2012	hst0	85	192	258	101.4	101.3	11.4	11.0	0.0	2.5	0.98
237	2013	hst0	71	259	382	101.3	101.7	9.9	9.9	-0.3	3.1	0.95
238	2014	hst0	64	302	379	99.4	98.1	9.8	8.7	1.3	3.3	0.94
239	2015	hst0	55	293	348	100.3	101.5	10.2	10.1	-1.2	4.4	0.90
240	2016	hst0	60	290	386	104.2	100.2	8.3	7.0	4.0	7.4	0.54
241	2017	hst0	56	326	397	102.3	101.2	8.5	7.8	1.1	8.4	0.47
242	2018	hst0	45	373	521	104.4	101.9	10.3	6.8	2.5	7.5	0.69
243	2019	hst0	41	247	289	105.2	101.8	9.3	5.6	3.4	10.2	0.13
244	2020	hst0	22	85	89	103.5	101.7	9.1	4.6	1.8	8.0	0.47
245	2010	hst1	74	148	226	101.7	101.8	8.6	8.4	0.0	1.8	0.98
246	2011	hst1	101	176	316	97.9	98.1	9.3	9.6	-0.2	1.8	0.98
247	2012	hst1	84	170	226	99.2	99.3	9.9	10.1	-0.1	2.4	0.97
248	2013	hst1	71	228	334	101.5	102.1	10.3	10.2	-0.6	2.2	0.98
249	2014	hst1	64	271	336	98.7	98.0	8.5	8.4	0.6	2.5	0.96
250	2015	hst1	54	264	309	100.6	101.4	9.5	9.5	-0.9	3.3	0.94
251	2016	hst1	60	250	329	103.2	100.5	8.3	7.5	2.7	6.4	0.68
252	2017	hst1	52	296	343	102.3	101.4	8.5	6.7	0.9	8.0	0.46
253	2018	hst1	35	277	330	104.1	102.5	10.1	8.0	1.6	7.1	0.71
254	2019	hst1	11	75	71	106.5	104.6	8.7	5.5	1.8	9.1	0.24
255	2010	hst2	71	102	160	104.1	104.0	8.2	8.2	0.1	1.8	0.98
256	2011	hst2	89	136	230	99.7	99.8	11.3	11.5	-0.1	1.7	0.99
257	2012	hst2	83	122	164	98.7	98.8	11.8	11.9	-0.1	1.9	0.99
258	2013	hst2	68	171	249	103.3	103.6	9.9	9.9	-0.3	2.3	0.97
259	2014	hst2	62	201	241	100.0	99.8	11.3	11.3	0.2	3.1	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
260	2015	hst2	52	200	239	100.1	100.9	9.3	10.1	-0.9	2.9	0.96
261	2016	hst2	53	193	233	101.8	99.8	10.9	7.7	1.9	7.8	0.69
262	2017	hst2	47	158	173	103.0	101.8	10.3	7.2	1.3	7.4	0.69
263	2018	hst2	15	53	49	103.4	103.9	9.0	8.4	-0.5	6.5	0.72
264	2010	hst3	61	69	104	105.6	105.6	8.8	8.6	0.0	1.4	0.99
265	2011	hst3	80	91	145	100.1	100.2	12.7	12.9	-0.1	1.5	0.99
266	2012	hst3	80	76	97	99.7	99.5	12.3	12.0	0.2	1.7	0.99
267	2013	hst3	66	110	156	103.3	103.6	10.8	11.1	-0.2	1.8	0.99
268	2014	hst3	62	119	138	100.8	100.4	11.0	11.2	0.3	2.7	0.97
269	2015	hst3	44	135	149	99.9	101.1	8.0	8.6	-1.1	2.9	0.94
270	2016	hst3	37	109	114	103.5	99.5	10.5	8.5	3.9	8.6	0.61
271	2017	hst3	10	54	29	106.8	102.7	6.9	7.6	4.1	7.5	0.46
272	2010	hst	75	202	308	103.5	103.5	7.7	7.5	0.0	1.5	0.98
273	2011	hst	104	241	434	99.4	99.4	10.2	10.4	-0.1	1.5	0.99
274	2012	hst	85	233	310	99.3	99.3	10.9	10.8	-0.1	1.7	0.99
275	2013	hst	71	314	454	102.6	103.1	9.9	9.9	-0.5	1.9	0.98
276	2014	hst	65	363	451	99.8	99.6	9.6	9.6	0.2	2.2	0.97
277	2015	hst	55	353	411	100.5	101.5	8.4	8.9	-0.9	2.5	0.96
278	2016	hst	62	331	447	102.4	99.9	9.0	7.4	2.5	6.6	0.69
279	2017	hst	56	377	458	102.1	101.5	8.7	7.3	0.6	6.6	0.67
280	2018	hst	45	407	563	102.2	101.2	8.7	7.3	1.0	5.9	0.74
281	2019	hst	41	250	293	104.9	102.3	6.5	6.1	2.6	5.6	0.60
282	2020	hst	22	85	89	103.4	102.4	9.5	8.3	1.0	4.4	0.89
283	2010	fert	165	218	519	93.8	93.9	9.2	9.2	-0.2	1.1	0.99
284	2011	fert	168	265	571	96.4	96.4	9.7	9.7	0.1	1.2	0.99
285	2012	fert	169	256	465	98.3	98.2	9.7	9.7	0.1	1.4	0.99
286	2013	fert	122	364	605	99.0	99.3	9.0	8.9	-0.3	1.5	0.99
287	2014	fert	85	553	800	99.1	99.2	9.5	9.6	-0.2	1.5	0.99
288	2015	fert	71	606	747	101.9	102.5	10.0	10.0	-0.6	1.7	0.99
289	2016	fert	70	584	835	99.8	99.9	10.2	8.5	-0.1	7.2	0.71
290	2017	fert	66	647	899	101.9	102.0	10.8	7.2	-0.1	7.4	0.73
291	2018	fert	52	522	759	101.9	101.5	10.2	7.0	0.4	6.8	0.74
292	2019	fert	22	166	178	103.0	104.0	8.8	8.2	-1.0	6.8	0.68
293	2010	interval	165	218	519	94.6	94.6	9.7	9.6	-0.1	1.0	0.99
294	2011	interval	168	265	571	96.7	96.7	10.1	10.2	0.0	1.2	0.99
295	2012	interval	169	256	465	97.7	97.8	10.1	10.0	-0.1	1.3	0.99
296	2013	interval	122	364	605	99.6	100.1	9.6	9.6	-0.4	1.4	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
297	2014	interval	85	553	800	98.8	99.1	9.2	9.2	-0.3	1.2	0.99
298	2015	interval	71	606	747	101.4	102.1	10.8	10.8	-0.7	1.9	0.98
299	2016	interval	70	584	835	99.6	99.3	9.3	8.2	0.3	6.6	0.72
300	2017	interval	66	647	899	101.6	101.5	10.6	7.9	0.1	7.0	0.75
301	2018	interval	52	522	759	102.3	101.6	9.7	7.1	0.7	6.2	0.77
302	2019	interval	22	166	178	103.0	102.7	8.0	8.2	0.4	5.7	0.75

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

Obs	diff	d_cr0	d_cr	d_nrr0	d_nrr	d_icf	d_ifl0	d_ifl	d_ais0	d_ais	d_hst	d_fert	d_interval
1	-33	.	.	.	.	.	1	.	.	.	.	.	.
2	-32	1	.	1	.	.	.	.	.	.	.	.	.
3	-28	.	.	.	.	.	1	.	1	.	.	.	.
4	-26	.	.	.	.	.	1	.	.	.	.	.	.
5	-25	1	.	.	.	.	.	.	.	.	.	.	.
6	-24	.	.	.	1	.	.	.	.	.	.	.	.
7	-23	.	.	2	.	.	.	.	.	.	.	.	.
8	-22	1	.	1	.	.	1	.	1	.	.	.	.
9	-21	3	.	.	1	.	.	.	.	1	.	.	.
10	-20	1	.	.	.	.	2	.	2	.	.	.	.
11	-19	2	1	2	.	.	2	.	2	.	.	.	.
12	-18	.	.	2	.	.	.	.	2	.	.	.	.
13	-17	.	.	.	.	.	4	.	1	.	.	1	1
14	-16	.	.	3	2	.	2	1	1	2	1	.	.
15	-15	2	1	4	.	.	4	.	3	1	.	1	.
16	-14	3	2	2	.	1	1	3	3	1	1	2	1
17	-13	3	5	5	.	.	1	3	2	1	1	5	1
18	-12	3	2	7	4	2	3	2	5	1	1	3	2
19	-11	5	3	7	6	1	6	4	8	3	3	5	5
20	-10	2	2	2	1	5	7	2	3	4	3	3	3
21	-9	4	2	9	3	2	9	5	4	5	3	3	4
22	-8	6	4	8	13	3	6	6	8	6	4	4	5
23	-7	10	9	10	9	9	16	11	11	12	7	11	3
24	-6	8	6	13	14	4	13	9	10	12	6	11	7
25	-5	9	14	14	24	9	6	17	11	15	10	10	14
26	-4	16	22	16	16	11	15	17	17	14	13	5	20
27	-3	20	33	25	14	20	14	18	25	16	11	18	16
28	-2	26	38	30	26	15	29	30	19	24	20	28	29
29	-1	31	33	19	27	37	34	37	31	28	23	31	25
30	0	30	19	24	32	32	21	33	23	31	21	29	28
31	1	22	24	22	27	33	25	29	31	32	27	23	26
32	2	17	16	16	25	19	18	25	19	35	25	13	19
33	3	22	12	17	17	19	20	15	20	23	18	16	13
34	4	17	10	17	13	11	14	11	20	12	18	7	8
35	5	12	16	14	10	7	13	10	13	7	10	12	9
36	6	8	6	6	16	10	15	10	10	6	11	5	7

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

Obs	diff	d_cr0	d_cr	d_nrr0	d_nrr	d_icf	d_ifl0	d_ifl	d_ais0	d_ais	d_hst	d_fert	d_interval
37	7	5	9	6	6	5	9	12	8	11	6	7	7
38	8	10	6	9	9	3	9	6	6	13	8	4	5
39	9	10	8	9	6	6	2	6	3	4	9	5	7
40	10	2	9	5	3	3	5	6	4	4	5	2	2
41	11	6	4	6	4	6	2	1	3	4	4	3	2
42	12	1	5	2	3	3	2	3	4	5	1	1	4
43	13	2	2	2	2	.	2	2	7	4	3	4	.
44	14	2	.	5	1	.	5	2	2	.	2	1	1
45	15	3	1	.	4	2	1	4	.	2	4	4	1
46	16	1	.	1	.	2	1	.	1	1	1	2	2
47	17	1	2	.	1	1	1	2	.	2	1	.	2
48	18	1	1	.	1	.	.	1	.	.	.	1	1
49	19	1	.	.	.	.	1	.	.	.	.	.	.
50	20	.	2	.	.	.	.	.	.	2	.	.	.
51	21	.	1	1	.	.	.	.	.	.	.	.	.
52	22	.	.	.	.	.	.	.	.	.	.	.	1
53	23	.	.	.	2	.	.	1	.	.	.	1	.
54	24	1	.	.	.	.	.	.	.	.	.	.	.
55	25	.	1	.	1	.	.	.	.	.	.	.	.

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

Obs	diff	p_cr0	p_cr	p_nrr0	p_nrr	p_icf	p_ifl0	p_ifl	p_ais0	p_ais	p_hst	p_fert	p_interval
1	-33	.	.	.	.	.	0	.	.	.	.	.	.
2	-32	0	.	0	.	.	.	.	.	.	.	.	.
3	-28	.	.	.	.	.	0	.	0	.	.	.	.
4	-26	.	.	.	.	.	0	.	.	.	.	.	.
5	-25	0	.	.	.	.	.	.	.	.	.	.	.
6	-24	.	.	.	0	.	.	.	.	.	.	.	.
7	-23	.	.	1	.	.	.	.	.	.	.	.	.
8	-22	0	.	0	.	.	0	.	0	.	.	.	.
9	-21	1	.	.	0	.	.	.	.	0	.	.	.
10	-20	0	.	.	.	.	1	.	1	.	.	.	.
11	-19	1	0	1	.	.	1	.	1	.	.	.	.
12	-18	.	.	1	.	.	.	.	1	.	.	.	.
13	-17	.	.	.	.	.	1	.	0	.	.	0	0
14	-16	.	.	1	1	.	1	0	0	1	0	.	.
15	-15	1	0	1	.	.	1	.	1	0	.	0	.
16	-14	1	1	1	.	0	0	1	1	0	0	1	0
17	-13	1	2	1	.	.	0	1	1	0	0	2	0
18	-12	1	1	2	1	1	1	1	1	0	0	1	1
19	-11	2	1	2	2	0	2	1	2	1	1	2	2
20	-10	1	1	1	0	2	2	1	1	1	1	1	1
21	-9	1	1	3	1	1	3	1	1	1	1	1	1
22	-8	2	1	2	4	1	2	2	2	2	1	1	2
23	-7	3	3	3	3	3	5	3	3	3	2	4	1
24	-6	2	2	4	4	1	4	3	3	3	2	4	2
25	-5	3	4	4	7	3	2	5	3	4	4	4	5
26	-4	5	7	5	5	4	4	5	5	4	5	2	7
27	-3	6	10	7	4	7	4	5	7	5	4	6	6
28	-2	8	11	9	8	5	8	9	6	7	7	10	10
29	-1	9	10	6	8	13	10	11	9	8	8	11	9
30	0	9	6	7	9	11	6	10	7	9	7	10	10
31	1	7	7	6	8	12	7	8	9	9	10	8	9
32	2	5	5	5	7	7	5	7	6	10	9	5	7
33	3	7	4	5	5	7	6	4	6	7	6	6	5
34	4	5	3	5	4	4	4	3	6	3	6	2	3
35	5	4	5	4	3	2	4	3	4	2	4	4	3
36	6	2	2	2	5	4	4	3	3	2	4	2	2

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

Obs	diff	p_cr0	p_cr	p_nrr0	p_nrr	p_icf	p_ifl0	p_ifl	p_ais0	p_ais	p_hst	p_fert	p_interval
37	7	2	3	2	2	2	3	3	2	3	2	2	2
38	8	3	2	3	3	1	3	2	2	4	3	1	2
39	9	3	2	3	2	2	1	2	1	1	3	2	2
40	10	1	3	1	1	1	1	2	1	1	2	1	1
41	11	2	1	2	1	2	1	0	1	1	1	1	1
42	12	0	2	1	1	1	1	1	1	1	0	0	1
43	13	1	1	1	1	.	1	1	2	1	1	1	.
44	14	1	.	1	0	.	1	1	1	.	1	0	0
45	15	1	0	.	1	1	0	1	.	1	1	1	0
46	16	0	.	0	.	1	0	.	0	0	0	1	1
47	17	0	1	.	0	0	0	1	.	1	0	.	1
48	18	0	0	.	0	.	.	0	.	.	.	0	0
49	19	0	.	.	.	.	0	.	.	.	.	.	.
50	20	.	1	.	.	.	.	.	.	1	.	.	.
51	21	.	0	0	.	.	.	.	.	.	.	.	.
52	22	.	.	.	.	.	.	.	.	.	.	.	0
53	23	.	.	.	1	.	.	0	.	.	.	0	.
54	24	0	.	.	.	.	.	.	.	.	.	.	.
55	25	.	0	.	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	cr0	165	261	620	95.3	95.3	8.6	8.5	0.0	0.8	1.00
2	2011	cr0	168	323	692	95.7	95.7	8.7	8.6	0.0	0.9	0.99
3	2012	cr0	169	309	560	100.1	100.1	8.4	8.5	0.0	1.1	0.99
4	2013	cr0	122	436	725	98.4	98.3	8.8	8.6	0.0	1.4	0.99
5	2014	cr0	85	665	955	97.7	97.8	11.1	10.8	-0.1	2.0	0.98
6	2015	cr0	71	735	898	101.1	102.3	10.1	9.4	-1.2	2.6	0.97
7	2016	cr0	70	710	1010	99.3	98.7	9.9	6.1	0.6	8.3	0.56
8	2017	cr0	66	797	1103	103.4	101.3	11.7	5.7	2.0	10.5	0.44
9	2018	cr0	52	863	1218	102.3	100.3	9.3	4.2	1.9	9.3	0.22
10	2019	cr0	49	555	620	102.4	100.1	11.2	4.2	2.3	10.2	0.43
11	2020	cr0	23	100	121	102.7	100.7	6.8	3.2	2.0	7.2	0.12
12	2010	cr1	165	216	513	91.5	91.5	8.6	8.7	0.0	0.8	1.00
13	2011	cr1	168	262	564	94.4	94.4	9.4	9.5	0.0	0.9	1.00
14	2012	cr1	169	252	459	97.2	97.2	9.1	9.1	0.0	1.2	0.99
15	2013	cr1	122	358	597	96.8	97.0	8.7	8.6	-0.2	1.3	0.99
16	2014	cr1	85	545	789	97.2	97.5	9.7	9.8	-0.2	1.7	0.99
17	2015	cr1	71	595	734	99.8	101.3	9.5	9.9	-1.5	2.3	0.97
18	2016	cr1	70	575	825	98.7	96.9	10.6	6.9	1.8	9.0	0.54
19	2017	cr1	66	632	874	101.3	99.0	11.6	5.8	2.3	10.0	0.50
20	2018	cr1	51	453	669	102.4	98.7	10.4	5.6	3.7	10.2	0.30
21	2019	cr1	15	107	101	96.9	94.8	10.6	4.6	2.1	11.5	0.02
22	2010	cr2	165	154	378	92.3	92.3	8.3	8.4	0.0	0.8	1.00
23	2011	cr2	168	188	408	95.0	95.0	9.3	9.4	0.0	0.9	1.00
24	2012	cr2	169	186	342	97.2	97.1	9.0	9.0	0.1	1.0	0.99
25	2013	cr2	122	265	446	96.8	97.1	8.6	8.5	-0.3	1.1	0.99
26	2014	cr2	84	410	590	97.8	97.9	9.8	10.0	-0.1	1.5	0.99
27	2015	cr2	71	447	571	99.5	100.9	9.2	9.4	-1.4	2.1	0.97
28	2016	cr2	70	411	595	98.8	96.8	10.4	6.9	2.0	8.6	0.56
29	2017	cr2	64	323	441	100.8	98.4	11.1	5.6	2.3	9.3	0.55
30	2018	cr2	19	70	73	104.2	98.8	11.8	6.4	5.4	11.6	0.30
31	2010	cr3	159	101	258	92.4	92.3	8.5	8.6	0.1	0.7	1.00
32	2011	cr3	162	122	260	95.3	95.3	9.6	9.7	0.0	0.9	1.00
33	2012	cr3	165	122	220	97.0	97.0	9.0	9.0	0.0	1.1	0.99
34	2013	cr3	116	181	296	97.1	97.3	8.4	8.4	-0.2	1.1	0.99
35	2014	cr3	84	258	366	98.0	98.2	9.8	9.9	-0.3	1.5	0.99
36	2015	cr3	71	278	360	99.2	100.6	8.9	9.2	-1.4	2.2	0.97
37	2016	cr3	61	200	296	99.8	97.2	10.1	6.8	2.6	8.6	0.54

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	2017	cr3	19	60	61	99.8	96.4	12.1	5.5	3.4	10.0	0.57
39	2010	cr	165	279	658	91.8	91.8	8.6	8.7	0.0	0.8	1.00
40	2011	cr	168	347	739	94.7	94.7	9.7	9.8	0.0	0.9	1.00
41	2012	cr	169	332	598	97.1	97.0	9.1	9.2	0.0	1.1	0.99
42	2013	cr	122	467	768	96.6	96.8	8.7	8.7	-0.2	1.2	0.99
43	2014	cr	85	711	1016	97.6	97.8	9.9	10.1	-0.2	1.5	0.99
44	2015	cr	71	785	952	99.4	100.9	9.4	9.6	-1.5	2.2	0.97
45	2016	cr	70	754	1067	98.8	96.7	10.7	7.0	2.1	8.9	0.56
46	2017	cr	66	843	1160	100.8	98.5	11.1	5.7	2.3	9.3	0.54
47	2018	cr	52	886	1248	101.8	98.3	9.8	5.5	3.5	9.5	0.34
48	2019	cr	49	556	622	101.8	98.0	8.2	5.1	3.8	6.7	0.58
49	2020	cr	23	100	121	103.6	99.8	6.8	4.2	3.8	6.4	0.39
50	2010	nrr0	165	247	588	98.6	98.6	7.5	7.4	0.0	1.0	0.99
51	2011	nrr0	168	303	649	98.9	98.7	8.8	8.7	0.2	1.1	0.99
52	2012	nrr0	169	293	530	101.7	101.7	9.3	9.3	0.1	1.3	0.99
53	2013	nrr0	122	412	683	100.4	100.2	9.2	8.8	0.2	1.8	0.98
54	2014	nrr0	85	628	906	99.5	99.2	11.4	11.2	0.3	2.3	0.98
55	2015	nrr0	71	698	858	101.9	102.1	10.4	10.3	-0.2	2.8	0.96
56	2016	nrr0	70	674	963	99.8	100.1	10.1	5.6	-0.3	8.7	0.51
57	2017	nrr0	66	758	1055	101.9	102.1	11.0	5.9	-0.2	9.8	0.46
58	2018	nrr0	52	840	1192	100.4	100.9	9.0	4.6	-0.5	9.6	0.11
59	2019	nrr0	50	637	692	100.1	101.4	11.3	4.1	-1.3	10.5	0.37
60	2020	nrr0	35	191	259	100.6	100.1	7.1	4.0	0.5	7.6	0.16
61	2010	nrr1	165	208	496	94.2	94.2	8.6	8.7	0.0	1.0	0.99
62	2011	nrr1	168	252	544	96.2	96.2	10.1	10.2	0.0	1.1	0.99
63	2012	nrr1	169	243	443	98.7	98.5	9.4	9.5	0.2	1.4	0.99
64	2013	nrr1	122	346	576	98.2	98.2	8.2	8.5	0.1	1.7	0.98
65	2014	nrr1	85	528	765	99.0	98.9	10.3	10.6	0.1	2.2	0.98
66	2015	nrr1	71	578	711	100.8	100.9	8.9	9.2	-0.1	2.5	0.96
67	2016	nrr1	70	558	799	99.3	98.6	11.2	6.5	0.6	9.7	0.51
68	2017	nrr1	66	624	867	99.7	99.9	11.2	5.7	-0.2	10.0	0.46
69	2018	nrr1	52	517	752	100.6	99.1	9.4	5.3	1.5	10.4	0.09
70	2019	nrr1	22	178	184	97.9	99.2	7.8	3.8	-1.3	6.8	0.49
71	2010	nrr2	165	149	366	94.1	94.0	8.3	8.4	0.0	0.9	0.99
72	2011	nrr2	168	182	395	95.8	95.8	10.6	10.6	0.1	1.1	1.00
73	2012	nrr2	169	180	331	98.1	98.0	9.1	9.1	0.1	1.3	0.99
74	2013	nrr2	122	257	433	96.5	96.7	8.7	8.8	-0.2	1.6	0.98

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	2014	nrr2	84	397	571	99.0	98.9	11.5	11.6	0.1	1.9	0.99
76	2015	nrr2	71	432	554	99.3	99.5	9.7	10.0	-0.3	2.5	0.97
77	2016	nrr2	70	406	584	98.8	97.8	12.3	7.3	1.0	10.0	0.59
78	2017	nrr2	65	372	513	98.7	98.2	11.0	6.6	0.6	8.7	0.62
79	2018	nrr2	31	119	155	99.1	98.0	11.6	6.4	1.2	12.3	0.18
80	2010	nrr3	158	98	250	93.8	93.8	9.0	9.0	0.0	0.8	1.00
81	2011	nrr3	160	120	254	96.2	96.2	11.0	11.1	0.0	0.9	1.00
82	2012	nrr3	165	118	214	98.4	98.2	9.5	9.6	0.1	1.2	0.99
83	2013	nrr3	114	177	287	97.5	97.2	8.6	8.6	0.3	1.3	0.99
84	2014	nrr3	84	250	354	99.3	99.5	11.7	12.0	-0.2	1.7	0.99
85	2015	nrr3	71	275	358	100.0	100.1	9.7	9.8	-0.1	2.3	0.97
86	2016	nrr3	67	211	316	98.8	97.4	11.7	7.4	1.3	9.9	0.55
87	2017	nrr3	32	91	106	97.7	96.9	12.7	7.2	0.8	9.2	0.70
88	2010	nrr	165	275	647	94.0	93.9	8.5	8.5	0.1	0.8	1.00
89	2011	nrr	168	341	724	96.0	96.0	10.5	10.6	0.0	1.0	1.00
90	2012	nrr	169	326	588	98.4	98.3	9.2	9.3	0.1	1.2	0.99
91	2013	nrr	122	459	756	97.1	97.1	8.3	8.4	0.0	1.4	0.99
92	2014	nrr	85	698	1001	99.2	99.2	11.1	11.4	0.0	1.7	0.99
93	2015	nrr	71	774	941	100.1	100.2	9.2	9.4	-0.2	2.1	0.97
94	2016	nrr	70	742	1053	98.9	97.9	11.6	6.9	1.0	9.6	0.56
95	2017	nrr	66	833	1153	99.1	98.9	10.7	6.2	0.2	8.5	0.61
96	2018	nrr	52	890	1258	100.0	98.5	9.5	5.3	1.5	9.9	0.19
97	2019	nrr	50	643	700	99.5	99.2	6.6	4.3	0.3	4.9	0.67
98	2020	nrr	35	191	259	101.2	99.5	5.3	4.9	1.7	5.6	0.41
99	2010	icf1	165	210	500	97.6	97.6	8.5	8.5	0.0	0.8	1.00
100	2011	icf1	168	254	548	97.9	98.0	9.7	9.8	-0.1	1.0	1.00
101	2012	icf1	169	245	447	97.8	97.9	8.7	8.6	-0.1	1.2	0.99
102	2013	icf1	122	349	582	100.0	100.2	8.9	8.7	-0.2	1.2	0.99
103	2014	icf1	85	532	772	97.9	98.0	8.5	8.7	-0.1	1.6	0.98
104	2015	icf1	71	583	718	98.8	98.7	10.7	10.5	0.0	2.2	0.98
105	2016	icf1	70	563	806	98.4	97.3	7.9	5.4	1.2	8.0	0.33
106	2017	icf1	66	630	875	99.4	98.3	9.5	5.2	1.1	8.8	0.40
107	2018	icf1	52	519	754	101.5	99.8	9.7	4.1	1.7	8.6	0.46
108	2019	icf1	22	166	178	99.2	96.0	6.5	4.9	3.3	5.1	0.63
109	2010	icf2	165	150	370	98.7	98.7	9.6	9.7	0.0	0.8	1.00
110	2011	icf2	168	184	399	99.2	99.3	10.7	10.8	-0.1	0.9	1.00
111	2012	icf2	169	182	335	98.5	98.6	9.9	10.0	-0.1	1.2	0.99

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	2013	icf2	122	260	438	101.3	101.4	9.9	9.7	-0.1	1.2	0.99
113	2014	icf2	84	401	577	98.2	98.3	11.0	11.1	-0.1	1.5	0.99
114	2015	icf2	71	437	560	99.5	99.7	11.6	11.6	-0.3	2.0	0.99
115	2016	icf2	70	410	591	98.5	96.8	8.9	7.1	1.7	8.4	0.47
116	2017	icf2	65	373	513	100.4	99.0	10.1	6.4	1.4	9.0	0.48
117	2018	icf2	28	118	146	104.7	100.5	8.7	5.5	4.2	7.7	0.48
118	2010	icf3	159	99	252	99.1	99.2	9.9	9.8	-0.1	0.8	1.00
119	2011	icf3	160	121	257	99.4	99.4	10.9	11.0	0.0	1.0	1.00
120	2012	icf3	165	119	217	98.1	98.2	9.8	9.9	-0.1	1.1	0.99
121	2013	icf3	115	178	291	101.4	101.6	10.3	10.1	-0.2	1.2	0.99
122	2014	icf3	84	254	359	98.8	98.9	11.0	11.2	-0.1	1.4	0.99
123	2015	icf3	71	279	363	98.8	99.4	11.7	11.8	-0.6	2.1	0.98
124	2016	icf3	67	214	320	98.9	97.0	9.1	6.8	1.9	8.7	0.43
125	2017	icf3	31	84	99	100.4	98.1	10.0	6.8	2.3	9.7	0.39
126	2010	icf	165	218	519	98.3	98.4	9.2	9.2	-0.1	0.8	1.00
127	2011	icf	168	265	571	98.7	98.7	10.4	10.4	0.0	1.0	1.00
128	2012	icf	169	256	465	98.1	98.2	9.2	9.3	-0.1	1.2	0.99
129	2013	icf	122	364	605	101.0	101.1	9.5	9.4	-0.1	1.2	0.99
130	2014	icf	85	553	800	98.2	98.4	10.0	10.2	-0.1	1.4	0.99
131	2015	icf	71	606	747	99.0	99.2	11.1	11.2	-0.2	2.0	0.98
132	2016	icf	70	584	835	98.7	97.1	8.4	6.3	1.5	8.2	0.41
133	2017	icf	66	647	899	100.1	98.8	9.6	6.0	1.3	8.6	0.47
134	2018	icf	52	522	759	101.4	99.7	9.2	4.7	1.7	7.9	0.50
135	2019	icf	22	166	178	99.7	96.3	7.2	5.6	3.4	5.4	0.67
136	2010	ifl0	165	237	565	98.1	98.1	9.4	9.2	0.0	1.0	0.99
137	2011	ifl0	168	291	624	98.3	98.2	8.9	8.8	0.1	1.1	0.99
138	2012	ifl0	169	282	512	101.6	101.7	8.8	8.8	-0.1	1.3	0.99
139	2013	ifl0	122	397	660	99.7	99.6	9.0	8.5	0.0	1.7	0.98
140	2014	ifl0	85	603	869	98.9	98.7	11.6	11.2	0.2	2.1	0.98
141	2015	ifl0	71	674	827	101.6	101.9	11.2	10.5	-0.3	2.8	0.97
142	2016	ifl0	70	648	926	99.7	100.2	11.2	6.2	-0.5	8.8	0.62
143	2017	ifl0	66	733	1021	102.1	101.9	11.1	5.6	0.2	9.7	0.49
144	2018	ifl0	52	814	1158	101.4	102.0	10.3	3.9	-0.6	10.2	0.22
145	2019	ifl0	50	621	673	101.0	101.0	11.9	4.0	-0.1	10.8	0.44
146	2020	ifl0	35	189	255	100.3	100.5	7.0	4.2	-0.2	7.0	0.28
147	2010	ifl1	165	209	498	94.2	94.2	9.1	9.2	0.0	0.9	0.99
148	2011	ifl1	168	253	545	96.4	96.5	9.8	9.9	0.0	1.0	0.99

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	2012	ifl1	169	244	444	98.5	98.4	9.3	9.2	0.1	1.2	0.99
150	2013	ifl1	122	348	580	98.4	98.6	8.9	8.9	-0.2	1.6	0.98
151	2014	ifl1	85	530	768	97.6	97.6	9.3	9.3	0.0	1.8	0.98
152	2015	ifl1	71	581	715	100.1	100.2	10.6	10.7	-0.1	2.0	0.98
153	2016	ifl1	70	559	801	97.8	96.7	10.4	7.3	1.1	9.2	0.51
154	2017	ifl1	66	628	873	100.0	98.9	11.4	5.5	1.1	10.0	0.47
155	2018	ifl1	52	521	759	100.7	99.3	10.1	5.1	1.5	9.6	0.36
156	2019	ifl1	22	181	186	98.2	96.6	8.3	6.0	1.6	7.8	0.44
157	2010	ifl2	165	150	368	95.5	95.5	8.7	8.8	0.0	0.8	1.00
158	2011	ifl2	168	183	397	97.2	97.2	9.6	9.6	0.0	0.9	1.00
159	2012	ifl2	169	181	333	98.6	98.6	9.2	9.2	0.0	1.1	0.99
160	2013	ifl2	122	259	436	98.5	98.8	8.9	8.9	-0.3	1.3	0.99
161	2014	ifl2	84	399	574	98.4	98.3	9.5	9.6	0.0	1.4	0.99
162	2015	ifl2	71	435	557	99.5	100.0	9.7	9.8	-0.5	1.9	0.98
163	2016	ifl2	70	409	588	98.3	96.9	9.9	7.4	1.4	8.4	0.56
164	2017	ifl2	65	375	518	99.8	98.6	10.4	5.5	1.2	8.9	0.52
165	2018	ifl2	31	120	156	101.1	99.1	9.7	5.7	1.9	9.6	0.32
166	2010	ifl3	159	98	251	95.9	95.9	9.2	9.3	-0.1	0.8	1.00
167	2011	ifl3	160	121	256	97.6	97.7	9.6	9.6	-0.1	0.9	1.00
168	2012	ifl3	165	119	216	98.8	98.8	9.3	9.3	0.0	1.1	0.99
169	2013	ifl3	115	178	289	99.0	99.1	8.8	8.7	-0.1	1.2	0.99
170	2014	ifl3	84	253	358	98.6	98.8	9.3	9.5	-0.1	1.5	0.99
171	2015	ifl3	71	278	362	99.6	100.0	9.6	9.7	-0.4	1.8	0.98
172	2016	ifl3	67	215	321	98.5	97.0	10.0	7.3	1.4	8.9	0.50
173	2017	ifl3	32	93	108	99.2	97.2	11.8	6.1	2.0	9.9	0.54
174	2010	ifl	165	272	641	95.1	95.1	9.1	9.2	0.0	0.8	1.00
175	2011	ifl	168	337	719	96.9	96.9	9.9	9.9	0.0	0.9	1.00
176	2012	ifl	169	323	584	98.7	98.6	9.3	9.3	0.1	1.1	0.99
177	2013	ifl	122	455	749	98.5	98.6	9.0	8.9	-0.2	1.4	0.99
178	2014	ifl	85	692	992	98.2	98.2	9.4	9.6	0.0	1.4	0.99
179	2015	ifl	71	766	932	99.7	100.1	10.1	10.1	-0.3	1.9	0.98
180	2016	ifl	70	735	1042	98.2	96.8	10.2	7.4	1.4	8.9	0.52
181	2017	ifl	66	826	1143	99.9	98.9	10.4	5.5	1.0	9.0	0.51
182	2018	ifl	52	875	1238	100.4	99.0	9.4	4.9	1.4	8.7	0.40
183	2019	ifl	50	628	681	101.0	98.8	7.3	5.3	2.2	5.6	0.65
184	2020	ifl	35	189	255	101.9	99.9	5.2	4.0	2.0	4.8	0.47
185	2010	ais0	165	243	578	98.4	98.4	8.3	8.2	-0.1	0.9	0.99

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
186	2011	ais0	168	297	636	99.0	98.8	9.0	8.8	0.2	1.2	0.99
187	2012	ais0	169	287	520	101.8	101.8	8.9	9.0	0.1	1.3	0.99
188	2013	ais0	122	404	671	100.5	100.2	8.7	8.3	0.3	1.7	0.98
189	2014	ais0	85	617	890	99.3	98.8	11.4	11.1	0.5	2.2	0.98
190	2015	ais0	71	688	843	101.7	101.0	10.7	10.3	0.7	2.6	0.97
191	2016	ais0	70	662	946	98.6	99.1	9.8	5.9	-0.6	8.2	0.55
192	2017	ais0	66	747	1038	101.5	101.2	11.5	5.7	0.3	9.7	0.54
193	2018	ais0	52	830	1177	100.3	100.4	8.8	4.4	-0.1	9.2	0.16
194	2019	ais0	50	638	692	99.7	100.2	10.6	4.1	-0.6	9.6	0.44
195	2020	ais0	35	191	259	100.0	99.2	6.5	4.0	0.8	6.7	0.25
196	2010	ais1	165	206	491	94.0	94.1	9.0	9.0	0.0	1.0	0.99
197	2011	ais1	168	249	539	96.8	96.8	9.8	9.9	0.0	1.0	0.99
198	2012	ais1	169	241	440	98.8	98.7	9.3	9.2	0.1	1.3	0.99
199	2013	ais1	122	343	571	98.6	98.8	8.9	9.1	-0.2	1.5	0.99
200	2014	ais1	85	524	759	98.2	97.9	10.9	11.0	0.3	1.9	0.99
201	2015	ais1	71	573	706	100.7	100.0	9.7	9.9	0.7	2.2	0.98
202	2016	ais1	70	553	792	97.5	97.4	11.1	7.9	0.1	9.6	0.53
203	2017	ais1	66	620	861	99.5	99.1	12.5	5.7	0.3	11.1	0.46
204	2018	ais1	52	508	742	100.3	98.6	10.8	5.8	1.7	11.0	0.23
205	2019	ais1	22	157	173	98.4	97.0	8.5	5.7	1.4	8.0	0.41
206	2010	ais2	165	147	363	95.5	95.5	8.4	8.6	0.0	0.8	1.00
207	2011	ais2	167	182	393	97.9	97.7	9.5	9.5	0.1	0.9	1.00
208	2012	ais2	169	178	329	99.1	99.0	8.9	8.9	0.1	1.2	0.99
209	2013	ais2	121	257	431	98.2	98.4	8.8	8.9	-0.2	1.3	0.99
210	2014	ais2	84	394	566	99.4	99.0	10.3	10.6	0.3	1.9	0.98
211	2015	ais2	71	429	550	99.5	99.1	9.1	9.5	0.3	1.9	0.98
212	2016	ais2	70	403	580	98.3	97.6	10.4	7.4	0.7	9.2	0.51
213	2017	ais2	65	365	504	98.9	98.2	10.5	5.7	0.7	9.0	0.51
214	2018	ais2	28	113	140	99.4	97.9	10.8	6.0	1.5	11.7	0.13
215	2010	ais3	158	97	248	95.3	95.3	9.2	9.2	0.0	0.8	1.00
216	2011	ais3	160	119	251	97.6	97.5	10.3	10.3	0.1	0.9	1.00
217	2012	ais3	164	117	213	98.9	98.7	9.1	9.1	0.2	1.2	0.99
218	2013	ais3	114	176	285	98.6	98.5	8.6	8.7	0.1	1.2	0.99
219	2014	ais3	84	248	352	99.4	99.1	10.8	11.0	0.3	1.9	0.99
220	2015	ais3	71	273	356	100.0	99.9	9.0	9.4	0.2	1.8	0.98
221	2016	ais3	67	208	312	98.4	97.2	10.3	7.5	1.2	9.6	0.46
222	2017	ais3	30	83	95	98.6	96.3	12.0	6.2	2.3	9.8	0.58

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
223	2010	ais	165	273	645	94.9	94.9	8.8	8.9	0.0	0.8	1.00
224	2011	ais	168	339	721	97.3	97.2	10.0	10.0	0.1	0.8	1.00
225	2012	ais	169	325	586	98.9	98.8	9.0	9.0	0.1	1.2	0.99
226	2013	ais	122	457	752	98.2	98.3	8.7	8.8	-0.1	1.3	0.99
227	2014	ais	85	695	997	99.1	98.7	10.6	10.8	0.4	1.8	0.99
228	2015	ais	71	771	937	100.0	99.7	9.0	9.4	0.3	1.7	0.98
229	2016	ais	70	740	1048	98.0	97.2	10.5	7.4	0.8	9.4	0.49
230	2017	ais	66	830	1147	99.1	98.5	10.7	5.8	0.7	9.3	0.50
231	2018	ais	52	886	1250	99.7	98.0	9.2	5.2	1.7	9.7	0.19
232	2019	ais	50	644	699	99.9	98.3	6.6	4.9	1.6	5.6	0.55
233	2020	ais	35	191	259	100.8	98.6	5.9	4.8	2.2	6.1	0.35
234	2010	hst0	75	167	261	102.4	102.3	10.2	10.1	0.1	1.5	0.99
235	2011	hst0	103	200	363	97.3	97.3	9.6	9.5	0.0	1.7	0.98
236	2012	hst0	85	192	258	101.1	101.2	11.7	11.3	-0.1	2.2	0.98
237	2013	hst0	71	259	382	101.1	101.4	10.6	10.6	-0.3	2.9	0.96
238	2014	hst0	64	302	379	99.0	98.2	9.9	8.9	0.8	3.3	0.94
239	2015	hst0	55	293	348	99.8	101.2	10.9	10.5	-1.4	4.7	0.90
240	2016	hst0	60	290	386	102.4	97.7	7.6	5.7	4.7	8.2	0.27
241	2017	hst0	56	326	397	101.5	100.1	8.9	5.5	1.5	9.2	0.27
242	2018	hst0	45	373	521	104.0	101.1	9.7	4.7	2.9	9.7	0.25
243	2019	hst0	41	247	289	103.4	99.7	10.1	3.9	3.7	10.5	0.08
244	2020	hst0	22	85	89	103.0	100.1	9.6	4.1	2.9	9.7	0.19
245	2010	hst1	74	148	226	102.4	102.3	8.9	8.9	0.1	1.2	0.99
246	2011	hst1	101	176	316	97.6	97.6	9.8	10.0	-0.1	1.4	0.99
247	2012	hst1	84	170	226	99.6	99.8	10.2	10.2	-0.1	1.9	0.98
248	2013	hst1	71	228	334	101.0	101.4	10.3	10.0	-0.4	1.9	0.98
249	2014	hst1	64	271	336	98.0	97.6	8.8	8.8	0.4	2.5	0.96
250	2015	hst1	54	264	309	99.4	100.1	9.3	9.5	-0.7	3.4	0.94
251	2016	hst1	60	250	329	102.0	98.2	8.1	6.0	3.9	7.1	0.53
252	2017	hst1	52	296	343	101.2	99.7	8.8	4.6	1.5	9.6	0.07
253	2018	hst1	35	277	330	103.2	100.9	9.7	4.5	2.3	9.0	0.40
254	2019	hst1	11	75	71	103.0	98.9	8.8	3.2	4.1	9.0	0.11
255	2010	hst2	71	102	160	103.7	103.7	8.4	8.6	0.0	1.0	0.99
256	2011	hst2	89	136	230	99.9	100.0	11.4	11.5	-0.1	1.5	0.99
257	2012	hst2	83	122	164	99.1	99.3	11.8	11.9	-0.2	1.6	0.99
258	2013	hst2	68	171	249	103.0	103.3	9.9	9.7	-0.3	2.0	0.98
259	2014	hst2	62	201	241	99.1	99.1	11.4	11.3	0.0	3.2	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
260	2015	hst2	52	200	239	98.9	99.9	9.4	10.0	-0.9	3.0	0.95
261	2016	hst2	53	193	233	101.0	98.1	11.3	7.4	3.0	9.8	0.51
262	2017	hst2	47	158	173	102.3	100.2	10.3	5.5	2.1	8.8	0.52
263	2018	hst2	15	53	49	102.5	101.3	8.7	5.3	1.2	8.5	0.33
264	2010	hst3	61	69	104	105.6	105.4	8.2	8.1	0.2	0.9	0.99
265	2011	hst3	80	91	145	100.4	100.5	12.5	12.7	-0.1	1.4	0.99
266	2012	hst3	80	76	97	99.6	99.6	12.3	12.1	0.0	1.7	0.99
267	2013	hst3	66	110	156	103.1	103.4	11.0	11.1	-0.3	1.6	0.99
268	2014	hst3	62	119	138	99.7	99.7	11.4	11.2	0.0	2.7	0.97
269	2015	hst3	44	135	149	99.0	100.3	8.4	8.8	-1.4	3.3	0.93
270	2016	hst3	37	109	114	102.8	98.0	11.5	8.0	4.8	10.8	0.43
271	2017	hst3	10	54	29	106.1	99.8	9.3	6.7	6.3	7.3	0.63
272	2010	hst	75	202	308	103.7	103.6	7.8	7.7	0.1	0.9	0.99
273	2011	hst	104	241	434	99.3	99.4	10.4	10.4	-0.1	1.2	0.99
274	2012	hst	85	233	310	99.6	99.7	10.8	10.6	-0.1	1.4	0.99
275	2013	hst	71	314	454	102.3	102.7	9.9	9.7	-0.4	1.6	0.99
276	2014	hst	65	363	451	99.0	98.9	9.8	9.7	0.1	2.3	0.97
277	2015	hst	55	353	411	99.1	100.2	8.6	8.9	-1.1	2.8	0.95
278	2016	hst	62	331	447	101.3	97.9	9.3	6.8	3.3	8.1	0.53
279	2017	hst	56	377	458	100.9	99.9	8.8	5.5	1.0	8.1	0.44
280	2018	hst	45	407	563	101.6	100.6	8.1	4.4	1.0	7.1	0.48
281	2019	hst	41	250	293	102.7	99.2	6.5	4.2	3.5	6.0	0.45
282	2020	hst	22	85	89	101.6	99.9	7.2	3.8	1.8	5.7	0.60
283	2010	fert	165	218	519	95.2	95.1	9.0	9.2	0.0	0.9	1.00
284	2011	fert	168	265	571	97.0	96.9	9.8	9.8	0.0	0.9	1.00
285	2012	fert	169	256	465	98.9	98.9	9.3	9.3	0.1	1.1	0.99
286	2013	fert	122	364	605	98.7	98.8	8.7	8.6	-0.1	1.3	0.99
287	2014	fert	85	553	800	98.2	98.2	9.5	9.6	0.1	1.5	0.99
288	2015	fert	71	606	747	99.9	100.2	10.2	10.2	-0.3	1.6	0.99
289	2016	fert	70	584	835	98.1	97.0	10.3	7.5	1.1	9.2	0.50
290	2017	fert	66	647	899	100.1	99.0	10.8	5.6	1.1	9.3	0.52
291	2018	fert	52	522	759	100.6	99.1	9.6	5.0	1.5	9.3	0.32
292	2019	fert	22	166	178	98.8	96.9	8.5	6.2	1.9	7.4	0.53
293	2010	interval	165	218	519	95.7	95.7	9.3	9.4	0.0	0.8	1.00
294	2011	interval	168	265	571	97.1	97.2	10.1	10.2	-0.1	0.9	1.00
295	2012	interval	169	256	465	98.3	98.2	9.5	9.5	0.0	1.2	0.99
296	2013	interval	122	364	605	99.3	99.4	9.3	9.2	-0.1	1.3	0.99

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
297	2014	interval	85	553	800	98.0	98.0	9.2	9.3	0.0	1.4	0.99
298	2015	interval	71	606	747	99.5	99.8	11.0	11.0	-0.3	1.9	0.98
299	2016	interval	70	584	835	98.1	96.5	9.0	7.2	1.6	8.8	0.43
300	2017	interval	66	647	899	100.0	98.6	10.4	5.7	1.3	9.2	0.48
301	2018	interval	52	522	759	100.9	99.2	9.3	5.2	1.8	8.4	0.45
302	2019	interval	22	166	178	99.3	96.4	7.7	6.5	3.0	6.2	0.63

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

Obs	diff	d_cr0	d_cr	d_nrr0	d_nrr	d_icf	d_ifl0	d_ifl	d_ais0	d_ais	d_hst	d_fert	d_interval
1	-35	.	.	.	.	.	1	.	.	.	.	.	.
2	-34	1	.	.	.	.	.	.	.	.	.	.	.
3	-33	.	.	1	.	.	.	.	.	.	.	.	.
4	-32	.	.	.	.	.	1	.	1	.	.	.	.
5	-29	.	.	.	1	.	.	.	.	.	.	.	.
6	-27	.	.	1	.	.	1	.	.	1	.	.	.
7	-25	.	.	1	.	.	.	.	.	.	.	.	.
8	-24	2	.	.	.	.	1	.	1	.	.	1	1
9	-23	2	.	.	.	.	1	1	.	.	.	.	.
10	-22	.	.	1	1	1	2	.	2	.	.	.	.
11	-21	.	1	1	.	.	.	.	2	.	.	.	1
12	-20	1	.	3	.	1	3	.	2	1	.	.	.
13	-19	.	.	4	1	.	.	.	2	1	.	.	.
14	-18	1	.	1	.	1	4	.	1	2	.	1	.
15	-17	4	.	2	1	.	1	1	.	.	2	1	.
16	-16	1	1	4	3	.	2	4	2	2	1	2	.
17	-15	.	1	.	.	2	1	1	3	2	1	4	1
18	-14	1	1	5	2	.	4	3	2	2	1	3	4
19	-13	2	4	4	1	2	2	.	6	2	1	1	2
20	-12	4	1	3	2	5	4	4	9	8	2	3	5
21	-11	3	4	7	4	2	5	2	3	1	2	2	2
22	-10	6	5	4	9	3	2	3	4	4	1	4	3
23	-9	3	5	4	4	4	11	2	3	1	6	4	2
24	-8	7	3	10	7	4	9	7	8	4	9	4	3
25	-7	3	3	11	14	1	11	9	4	9	6	6	7
26	-6	9	5	9	8	11	8	5	9	9	7	9	6
27	-5	9	17	12	15	8	11	14	9	14	11	3	10
28	-4	20	14	12	14	12	11	13	12	13	6	15	5
29	-3	14	25	18	20	14	12	17	10	9	18	13	16
30	-2	26	36	20	14	14	26	30	27	29	16	17	22
31	-1	29	22	25	26	24	26	29	25	27	19	39	34
32	0	20	20	19	20	29	20	31	26	30	18	16	21
33	1	19	21	25	30	23	26	27	27	26	14	24	22
34	2	19	12	17	28	23	26	20	27	26	20	22	21
35	3	13	10	26	20	16	17	18	17	16	20	12	15
36	4	16	18	11	18	9	17	17	16	14	15	6	8

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

Obs	diff	d_cr0	d_cr	d_nrr0	d_nrr	d_icf	d_ifl0	d_ifl	d_ais0	d_ais	d_hst	d_fert	d_interval
37	5	12	11	15	11	4	6	9	11	10	7	8	4
38	6	17	5	7	10	13	11	12	11	8	16	6	12
39	7	3	11	8	14	6	9	14	15	19	17	10	9
40	8	9	9	8	9	8	8	7	9	5	8	7	11
41	9	4	11	8	2	7	11	5	8	7	8	4	3
42	10	8	6	4	7	2	8	7	4	7	5	4	2
43	11	7	10	6	3	5	3	4	5	8	4	3	3
44	12	9	8	7	4	11	2	4	4	6	4	1	3
45	13	7	4	5	6	2	1	3	3	3	.	3	1
46	14	4	8	1	2	4	3	3	2	2	2	4	4
47	15	3	5	1	1	.	3	5	2	3	4	4	2
48	16	1	2	5	3	4	1	2	1	1	2	5	4
49	17	1	1	3	2	2	3	2	2	2	1	1	1
50	18	.	1	2	1	.	2	2	1	3	2	1	2
51	19	2	2	.	.	1	1	.	.	.	2	.	1
52	20	1	.	1	.	.	2	3	2	.	2	1	4
53	21	1	2	1	1	.	1	2	3	3	1	1	1
54	22	2	1	.	.	2	3	.	1	.	.	3	.
55	23	3	.	.	.	.	.	.	.	.	.	1	.
56	24	.	.	.	1	.	.	.	.	1	.	.	1
57	25	.	.	.	1	1	.	1	.	2	.	.	1
58	26	1	.	1	2	.	.	.	.	1	.	.	.
59	27	.	1	.	.	.	.	.	.	.	.	1	1
60	28	.	1	.	1	.	.	1	.	.	.	.	.
61	29	.	1	.	.	.	.	.	.	.	.	1	.
62	30	.	1	.	.	.	.	.	.	.	.	.	.
63	31	1	1	.	.	.	.	.	.	.	.	.	.

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

Obs	diff	p_cr0	p_cr	p_nrr0	p_nrr	p_icf	p_ifl0	p_ifl	p_ais0	p_ais	p_hst	p_fert	p_interval
1	-35	.	.	.	.	.	0	.	.	.	.	.	.
2	-34	0	.	.	.	.	.	.	.	.	.	.	.
3	-33	.	.	0	.	.	.	.	.	.	.	.	.
4	-32	.	.	.	.	.	0	.	0	.	.	.	.
5	-29	.	.	.	0	.	.	.	.	.	.	.	.
6	-27	.	.	0	.	.	0	.	.	0	.	.	.
7	-25	.	.	0	.	.	.	.	.	.	.	.	.
8	-24	1	.	.	.	.	0	.	0	.	.	0	0
9	-23	1	.	.	.	.	0	0	.	.	.	.	.
10	-22	.	.	0	0	0	1	.	1	.	.	.	.
11	-21	.	0	0	.	.	.	.	1	.	.	.	0
12	-20	0	.	1	.	0	1	.	1	0	.	.	.
13	-19	.	.	1	0	.	.	.	1	0	.	.	.
14	-18	0	.	0	.	0	1	.	0	1	.	0	.
15	-17	1	.	1	0	.	0	0	.	.	1	0	.
16	-16	0	0	1	1	.	1	1	1	1	0	1	.
17	-15	.	0	.	.	1	0	0	1	1	0	1	0
18	-14	0	0	1	1	.	1	1	1	1	0	1	1
19	-13	1	1	1	0	1	1	.	2	1	0	0	1
20	-12	1	0	1	1	2	1	1	3	2	1	1	2
21	-11	1	1	2	1	1	1	1	1	0	1	1	1
22	-10	2	2	1	3	1	1	1	1	1	0	1	1
23	-9	1	2	1	1	1	3	1	1	0	2	1	1
24	-8	2	1	3	2	1	3	2	2	1	3	1	1
25	-7	1	1	3	4	0	3	3	1	3	2	2	2
26	-6	3	2	3	2	4	2	1	3	3	2	3	2
27	-5	3	5	3	4	3	3	4	3	4	4	1	4
28	-4	6	4	3	4	4	3	4	3	4	2	5	2
29	-3	4	8	5	6	5	3	5	3	3	6	5	6
30	-2	8	11	6	4	5	8	9	8	8	6	6	8
31	-1	9	7	7	8	9	8	8	7	8	7	14	12
32	0	6	6	6	6	10	6	9	8	9	6	6	7
33	1	6	6	7	9	8	8	8	8	8	5	9	8
34	2	6	4	5	8	8	8	6	8	8	7	8	7
35	3	4	3	8	6	6	5	5	5	5	7	4	5
36	4	5	5	3	5	3	5	5	5	4	5	2	3

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

Obs	diff	p_cr0	p_cr	p_nrr0	p_nrr	p_icf	p_ifl0	p_ifl	p_ais0	p_ais	p_hst	p_fert	p_interval
37	5	4	3	4	3	1	2	3	3	3	2	3	1
38	6	5	2	2	3	5	3	3	3	2	6	2	4
39	7	1	3	2	4	2	3	4	4	6	6	4	3
40	8	3	3	2	3	3	2	2	3	1	3	2	4
41	9	1	3	2	1	2	3	1	2	2	3	1	1
42	10	2	2	1	2	1	2	2	1	2	2	1	1
43	11	2	3	2	1	2	1	1	1	2	1	1	1
44	12	3	2	2	1	4	1	1	1	2	1	0	1
45	13	2	1	1	2	1	0	1	1	1	.	1	0
46	14	1	2	0	1	1	1	1	1	1	1	1	1
47	15	1	2	0	0	.	1	1	1	1	1	1	1
48	16	0	1	1	1	1	0	1	0	0	1	2	1
49	17	0	0	1	1	1	1	1	1	1	0	0	0
50	18	.	0	1	0	.	1	1	0	1	1	0	1
51	19	1	1	.	.	0	0	.	.	.	1	.	0
52	20	0	.	0	.	.	1	1	1	.	1	0	1
53	21	0	1	0	0	.	0	1	1	1	0	0	0
54	22	1	0	.	.	1	1	.	0	.	.	1	.
55	23	1	.	.	.	.	.	.	.	.	.	0	.
56	24	.	.	.	0	.	.	.	.	0	.	.	0
57	25	.	.	.	0	0	.	0	.	1	.	.	0
58	26	0	.	0	1	.	.	.	.	0	.	.	.
59	27	.	0	.	.	.	.	.	.	.	.	0	0
60	28	.	0	.	0	.	.	0	.	.	.	.	.
61	29	.	0	.	.	.	.	.	.	.	.	0	.
62	30	.	0	.	.	.	.	.	.	.	.	.	.
63	31	0	0	.	.	.	.	.	.	.	.	.	.

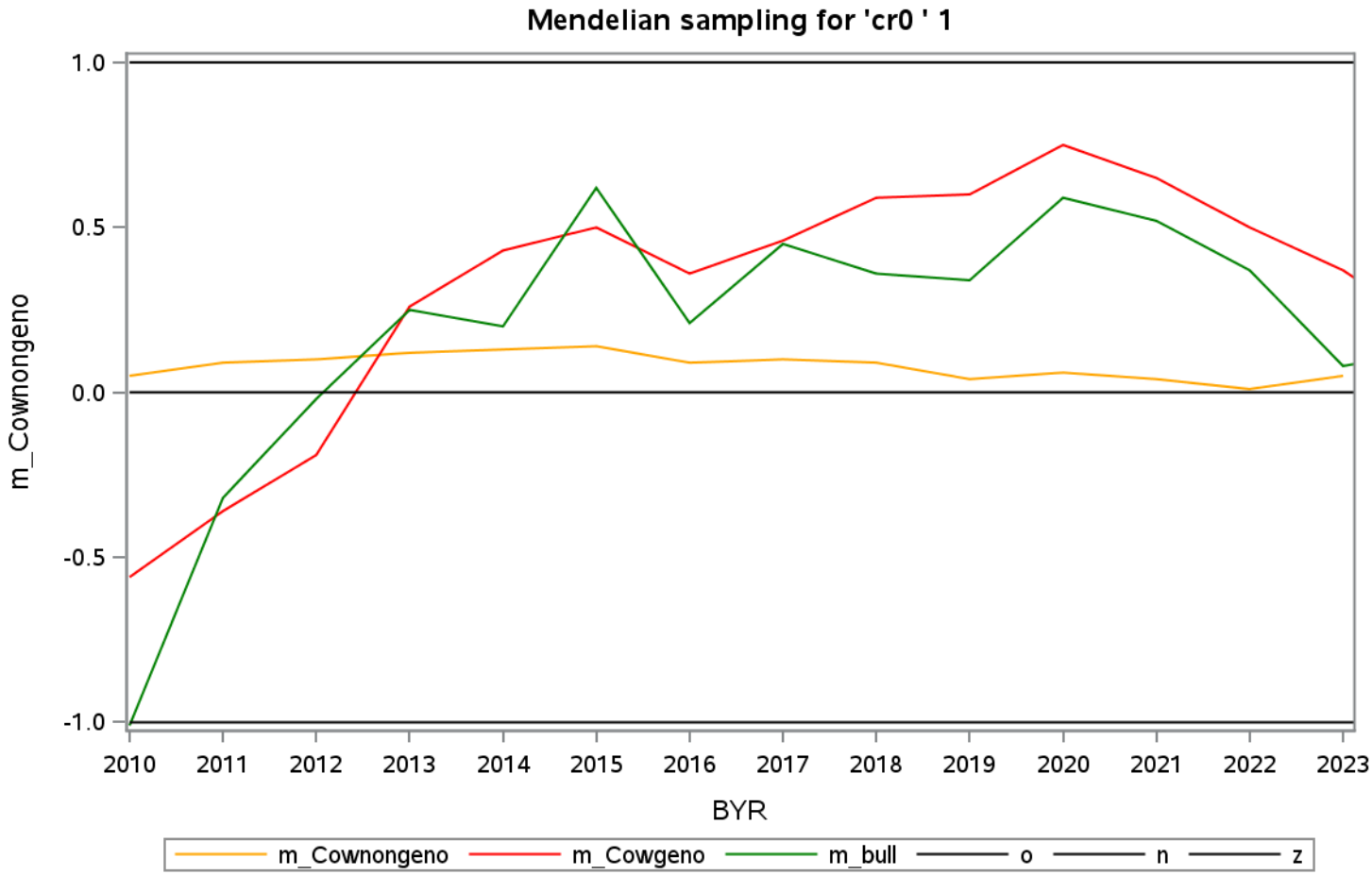
RDC Legarra Reverter regression for SS for bulls, born after 2015 and with minimum 15 offspring in full and no offspring in reduc

Obs	status	t	name	no	b1	rsq
1	1&2	1	cr0	265	1.06	0.40
2	1&2	2	cr1	204	0.98	0.48
3	1&2	3	cr2	154	1.01	0.55
4	1&2	4	cr3	81	0.92	0.47
5	1&2	5	cr	265	1.00	0.55
6	1&2	6	nrr0	278	0.88	0.33
7	1&2	7	nrr1	214	0.80	0.36
8	1&2	8	nrr2	167	0.94	0.49
9	1&2	9	nrr3	100	0.94	0.51
10	1&2	10	nrr	278	0.91	0.49
11	1&2	11	icf1	213	0.94	0.55
12	1&2	12	icf2	164	0.89	0.59
13	1&2	13	icf3	99	0.83	0.52
14	1&2	14	icf	213	0.93	0.61
15	1&2	15	ifl0	278	1.09	0.40
16	1&2	16	ifl1	214	0.95	0.50
17	1&2	17	ifl2	167	0.94	0.53
18	1&2	18	ifl3	100	0.92	0.49
19	1&2	19	ifl	278	0.96	0.55
20	1&2	20	ais0	278	0.98	0.43
21	1&2	21	ais1	213	0.96	0.49
22	1&2	22	ais2	164	0.94	0.49
23	1&2	23	ais3	98	0.89	0.48
24	1&2	24	ais	278	0.93	0.52
25	1&2	25	hst0	226	0.64	0.23
26	1&2	26	hst1	159	0.72	0.36
27	1&2	27	hst2	116	0.92	0.48
28	1&2	28	hst3	49	0.70	0.36
29	1&2	29	hst	228	0.83	0.50
30	1&2	34	fert	213	0.96	0.52
31	1&2	35	inte	213	0.93	0.56

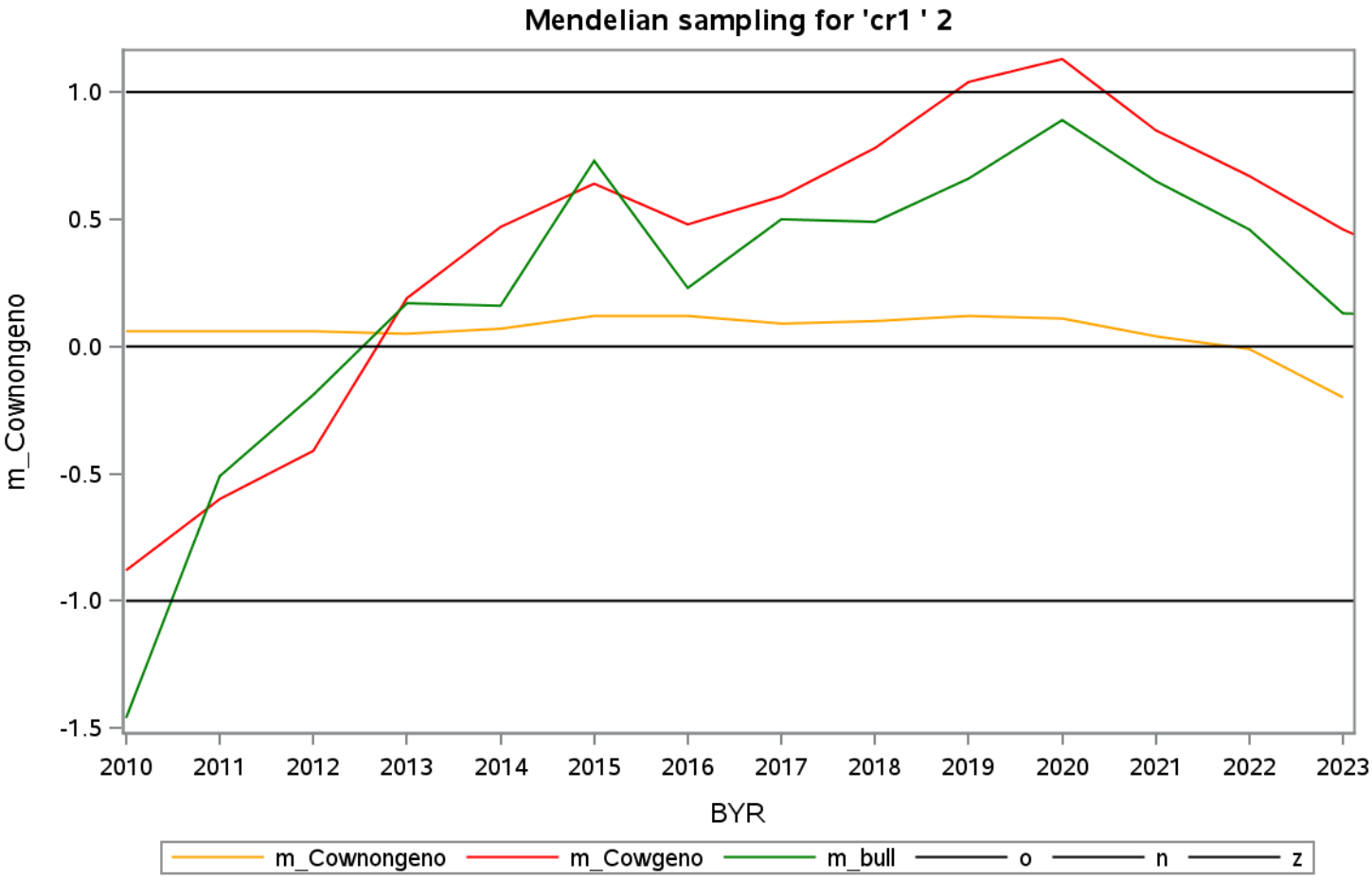
RDC Legarra Reverter regression for EBV for bulls, born after 2015 and with minimum 15 offspring in full and no offspring in reduc

Obs	status	t	name	no	b1	rsq
1	1&2	1	cr0	265	0.90	0.21
2	1&2	2	cr1	204	0.84	0.22
3	1&2	3	cr2	154	0.92	0.28
4	1&2	4	cr3	81	0.90	0.30
5	1&2	5	cr	265	0.89	0.27
6	1&2	6	nrr0	278	0.73	0.15
7	1&2	7	nrr1	214	0.75	0.17
8	1&2	8	nrr2	167	0.91	0.29
9	1&2	9	nrr3	100	0.99	0.36
10	1&2	10	nrr	278	0.85	0.26
11	1&2	11	icf1	213	0.72	0.17
12	1&2	12	icf2	164	0.70	0.24
13	1&2	13	icf3	99	0.56	0.17
14	1&2	14	icf	213	0.72	0.22
15	1&2	15	ifl0	278	0.93	0.22
16	1&2	16	ifl1	214	0.80	0.22
17	1&2	17	ifl2	167	0.81	0.26
18	1&2	18	ifl3	100	0.80	0.26
19	1&2	19	ifl	278	0.82	0.27
20	1&2	20	ais0	278	0.88	0.21
21	1&2	21	ais1	213	0.75	0.19
22	1&2	22	ais2	164	0.74	0.21
23	1&2	23	ais3	98	0.77	0.24
24	1&2	24	ais	278	0.69	0.20
25	1&2	25	hst0	226	0.38	0.04
26	1&2	26	hst1	159	0.56	0.11
27	1&2	27	hst2	116	0.81	0.25
28	1&2	28	hst3	49	0.68	0.23
29	1&2	29	hst	228	0.74	0.23
30	1&2	34	fert	213	0.78	0.23
31	1&2	35	inte	213	0.71	0.22

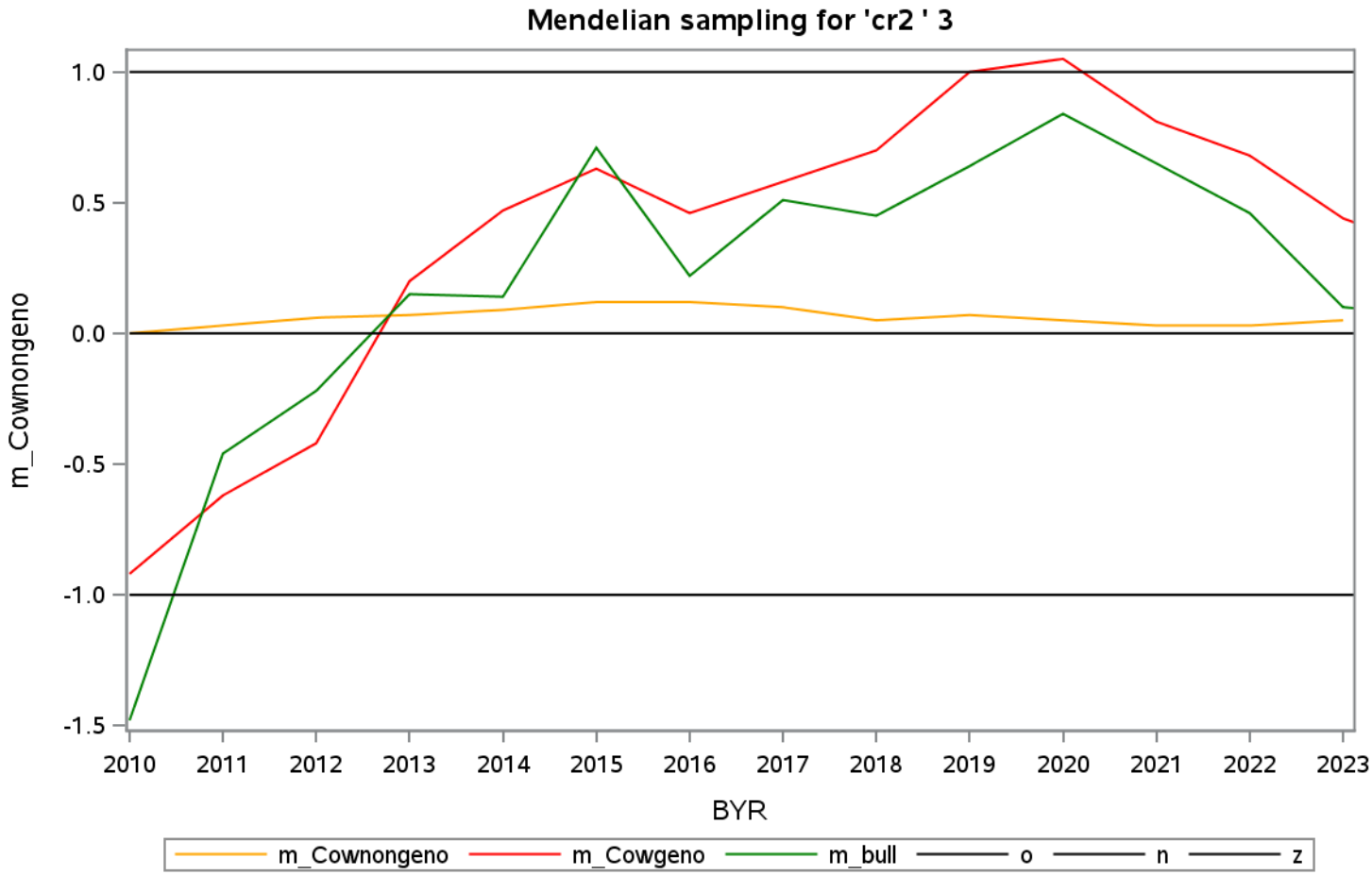
Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	0.05	-0.56	-1.01	100540	3545	987
2	2011	0.09	-0.36	-0.32	95864	6101	1808
3	2012	0.10	-0.19	-0.02	86133	6868	2317
4	2013	0.12	0.26	0.25	81389	7351	2338
5	2014	0.13	0.43	0.20	73861	8258	2322
6	2015	0.14	0.50	0.62	63368	10921	2369
7	2016	0.09	0.36	0.21	53603	14960	2336
8	2017	0.10	0.46	0.45	45811	17902	2607
9	2018	0.09	0.59	0.36	38934	20167	2555
10	2019	0.04	0.60	0.34	33537	20566	2445
11	2020	0.06	0.75	0.59	30260	22785	2828
12	2021	0.04	0.65	0.52	26036	23109	2771
13	2022	0.01	0.50	0.37	14150	23920	2573
14	2023	0.05	0.37	0.08	10	21359	2269
15	2024	.	0.18	0.13	.	4805	667



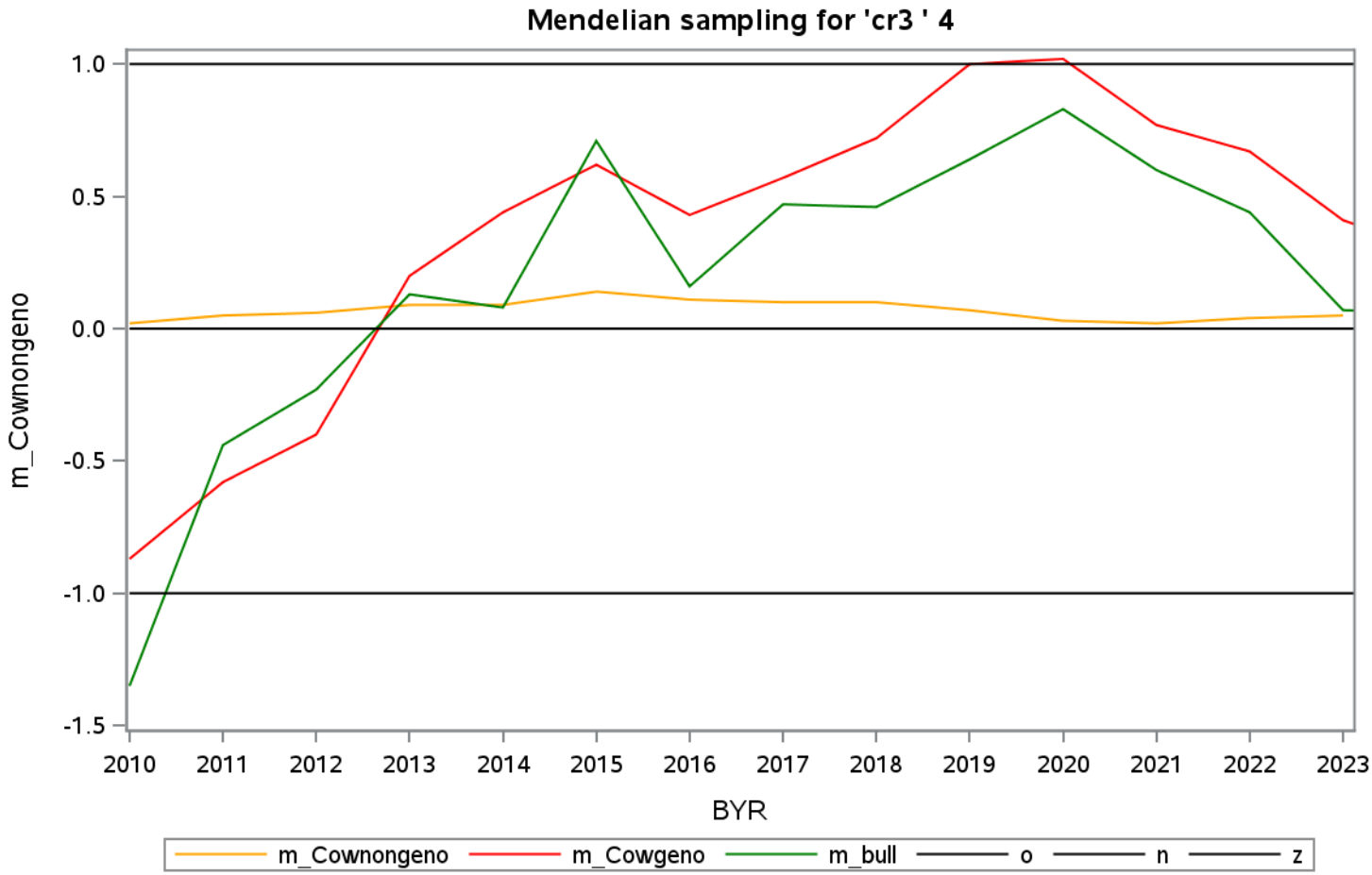
Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	0.06	-0.88	-1.46	100540	3545	987
2	2011	0.06	-0.60	-0.51	95864	6101	1808
3	2012	0.06	-0.41	-0.19	86133	6868	2317
4	2013	0.05	0.19	0.17	81389	7351	2338
5	2014	0.07	0.47	0.16	73861	8258	2322
6	2015	0.12	0.64	0.73	63368	10921	2369
7	2016	0.12	0.48	0.23	53603	14960	2336
8	2017	0.09	0.59	0.50	45811	17902	2607
9	2018	0.10	0.78	0.49	38934	20167	2555
10	2019	0.12	1.04	0.66	33537	20566	2445
11	2020	0.11	1.13	0.89	30260	22785	2828
12	2021	0.04	0.85	0.65	26036	23109	2771
13	2022	-0.01	0.67	0.46	14150	23920	2573
14	2023	-0.20	0.46	0.13	10	21359	2269
15	2024	.	0.30	0.12	.	4805	667



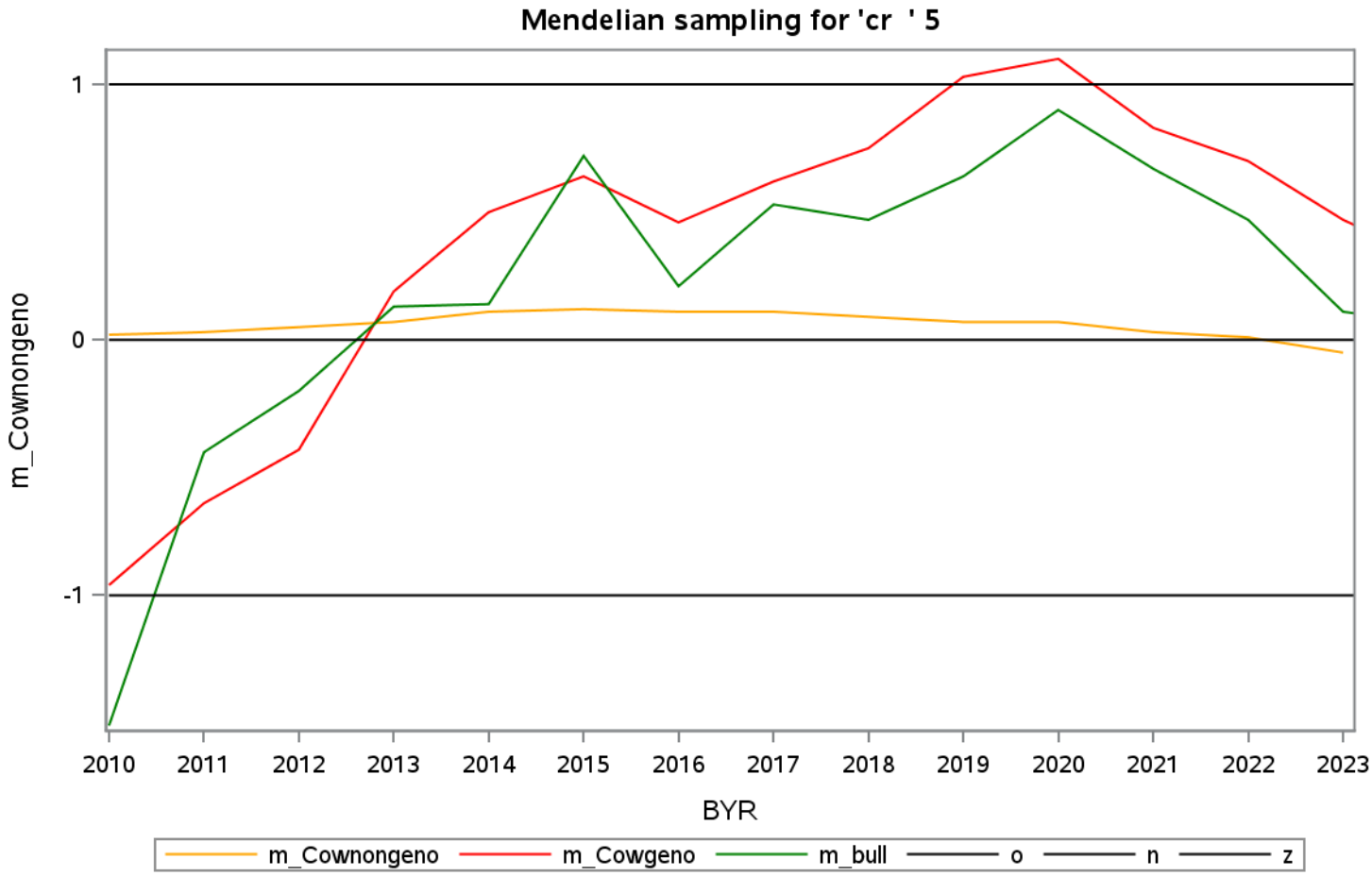
Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	0.00	-0.92	-1.48	100540	3545	987
2	2011	0.03	-0.62	-0.46	95864	6101	1808
3	2012	0.06	-0.42	-0.22	86133	6868	2317
4	2013	0.07	0.20	0.15	81389	7351	2338
5	2014	0.09	0.47	0.14	73861	8258	2322
6	2015	0.12	0.63	0.71	63368	10921	2369
7	2016	0.12	0.46	0.22	53603	14960	2336
8	2017	0.10	0.58	0.51	45811	17902	2607
9	2018	0.05	0.70	0.45	38934	20167	2555
10	2019	0.07	1.00	0.64	33537	20566	2445
11	2020	0.05	1.05	0.84	30260	22785	2828
12	2021	0.03	0.81	0.65	26036	23109	2771
13	2022	0.03	0.68	0.46	14150	23920	2573
14	2023	0.05	0.44	0.10	10	21359	2269
15	2024	.	0.31	0.07	.	4805	667



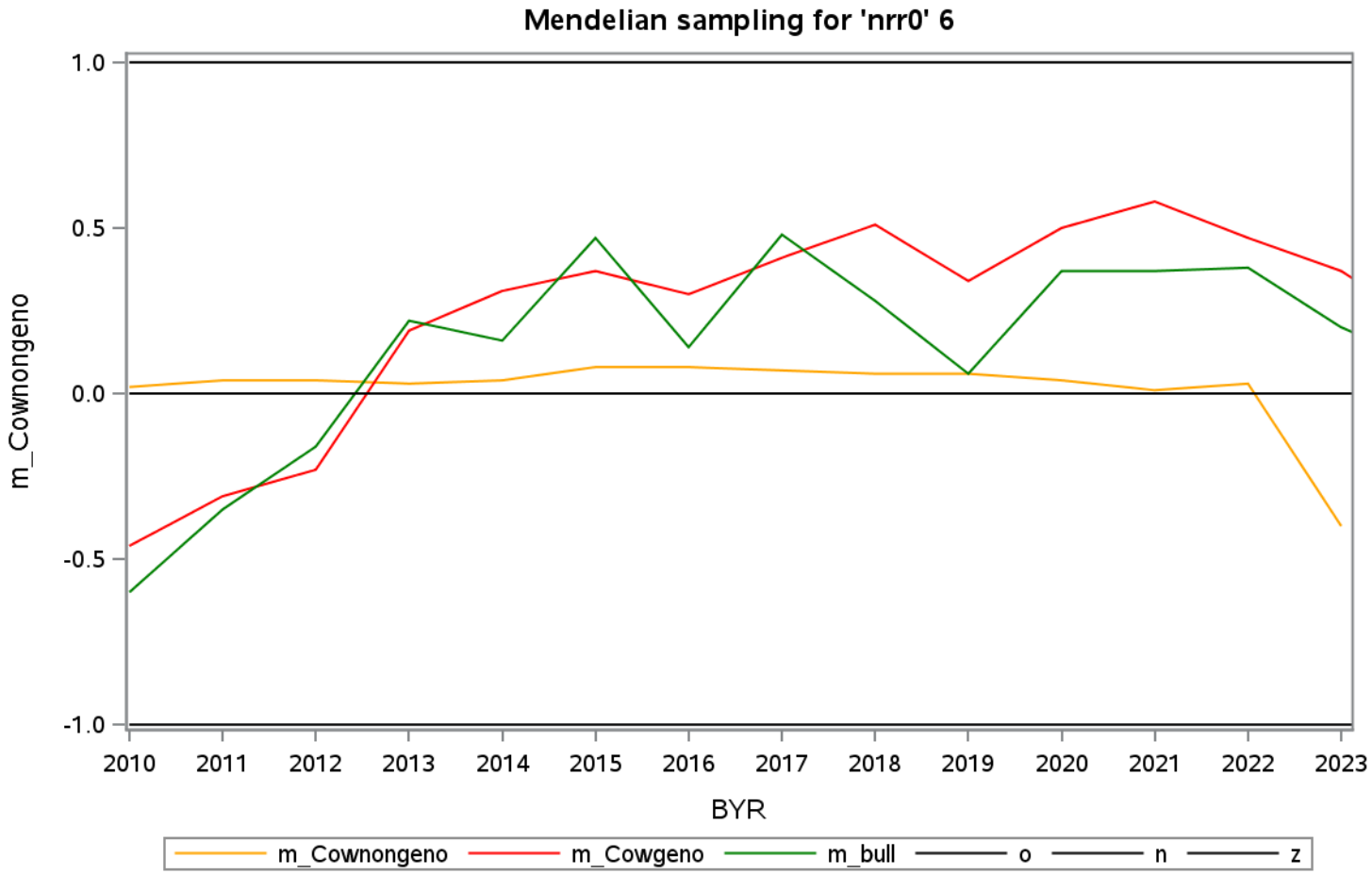
Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	0.02	-0.87	-1.35	100540	3545	987
2	2011	0.05	-0.58	-0.44	95864	6101	1808
3	2012	0.06	-0.40	-0.23	86133	6868	2317
4	2013	0.09	0.20	0.13	81389	7351	2338
5	2014	0.09	0.44	0.08	73861	8258	2322
6	2015	0.14	0.62	0.71	63368	10921	2369
7	2016	0.11	0.43	0.16	53603	14960	2336
8	2017	0.10	0.57	0.47	45811	17902	2607
9	2018	0.10	0.72	0.46	38934	20167	2555
10	2019	0.07	1.00	0.64	33537	20566	2445
11	2020	0.03	1.02	0.83	30260	22785	2828
12	2021	0.02	0.77	0.60	26036	23109	2771
13	2022	0.04	0.67	0.44	14150	23920	2573
14	2023	0.05	0.41	0.07	10	21359	2269
15	2024	.	0.29	0.06	.	4805	667



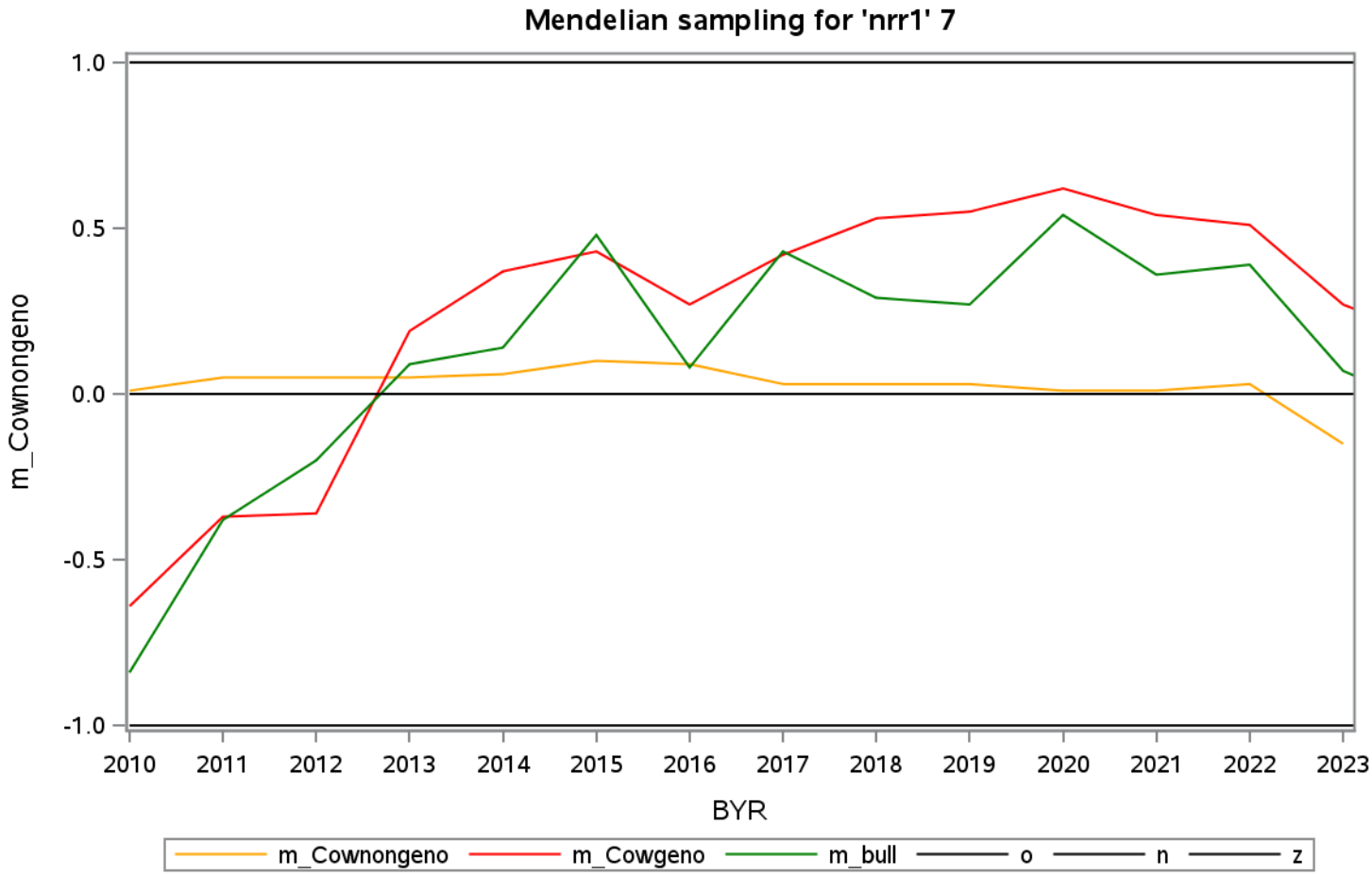
Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	0.02	-0.96	-1.51	100540	3545	987
2	2011	0.03	-0.64	-0.44	95864	6101	1808
3	2012	0.05	-0.43	-0.20	86133	6868	2317
4	2013	0.07	0.19	0.13	81389	7351	2338
5	2014	0.11	0.50	0.14	73861	8258	2322
6	2015	0.12	0.64	0.72	63368	10921	2369
7	2016	0.11	0.46	0.21	53603	14960	2336
8	2017	0.11	0.62	0.53	45811	17902	2607
9	2018	0.09	0.75	0.47	38934	20167	2555
10	2019	0.07	1.03	0.64	33537	20566	2445
11	2020	0.07	1.10	0.90	30260	22785	2828
12	2021	0.03	0.83	0.67	26036	23109	2771
13	2022	0.01	0.70	0.47	14150	23920	2573
14	2023	-0.05	0.47	0.11	10	21359	2269
15	2024	.	0.30	0.06	.	4805	667



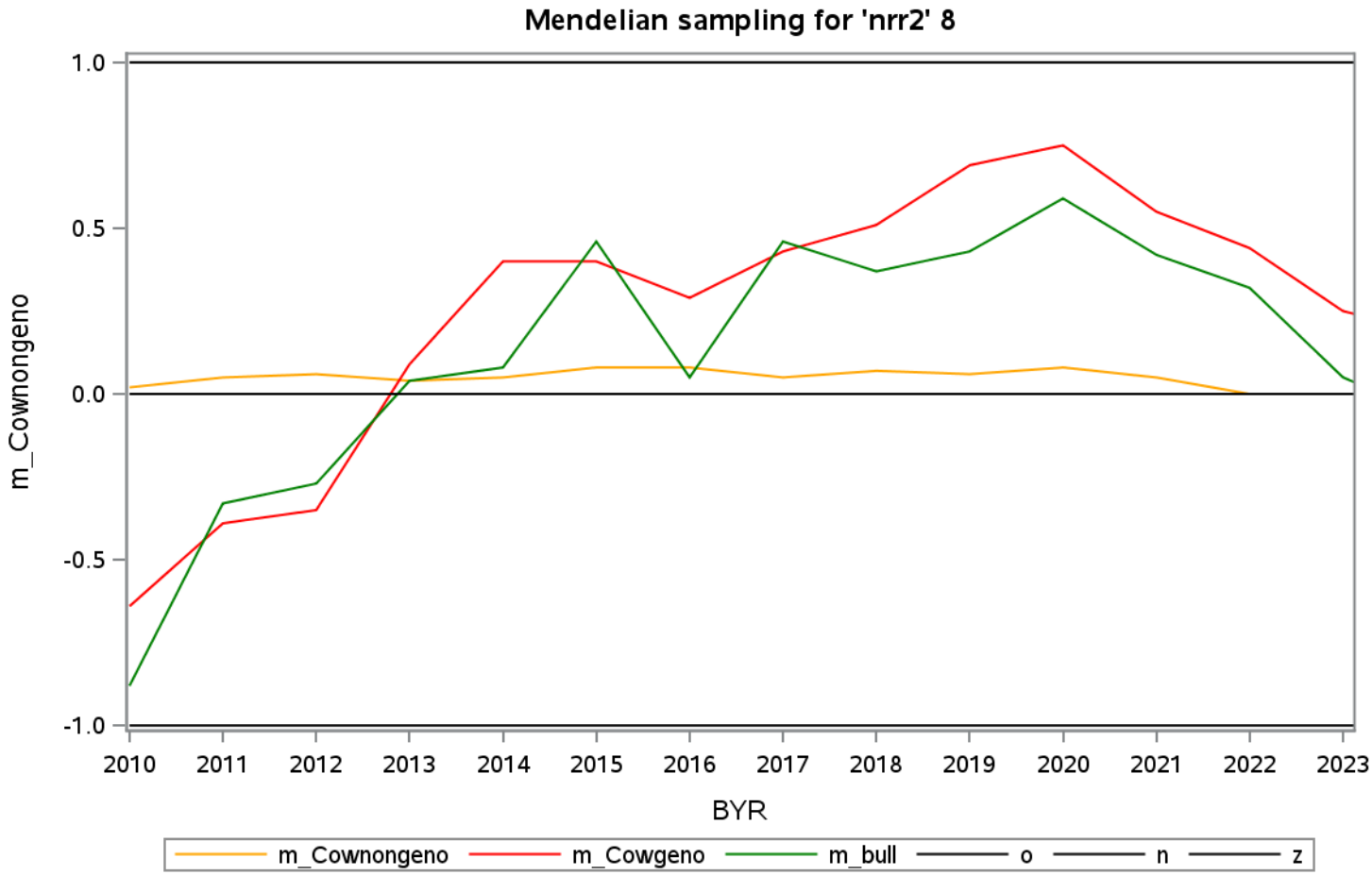
Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	0.02	-0.46	-0.60	100540	3545	987
2	2011	0.04	-0.31	-0.35	95864	6101	1808
3	2012	0.04	-0.23	-0.16	86133	6868	2317
4	2013	0.03	0.19	0.22	81389	7351	2338
5	2014	0.04	0.31	0.16	73861	8258	2322
6	2015	0.08	0.37	0.47	63368	10921	2369
7	2016	0.08	0.30	0.14	53603	14960	2336
8	2017	0.07	0.41	0.48	45811	17902	2607
9	2018	0.06	0.51	0.28	38934	20167	2555
10	2019	0.06	0.34	0.06	33537	20566	2445
11	2020	0.04	0.50	0.37	30260	22785	2828
12	2021	0.01	0.58	0.37	26036	23109	2771
13	2022	0.03	0.47	0.38	14150	23920	2573
14	2023	-0.40	0.37	0.20	10	21359	2269
15	2024	.	0.19	0.08	.	4805	667



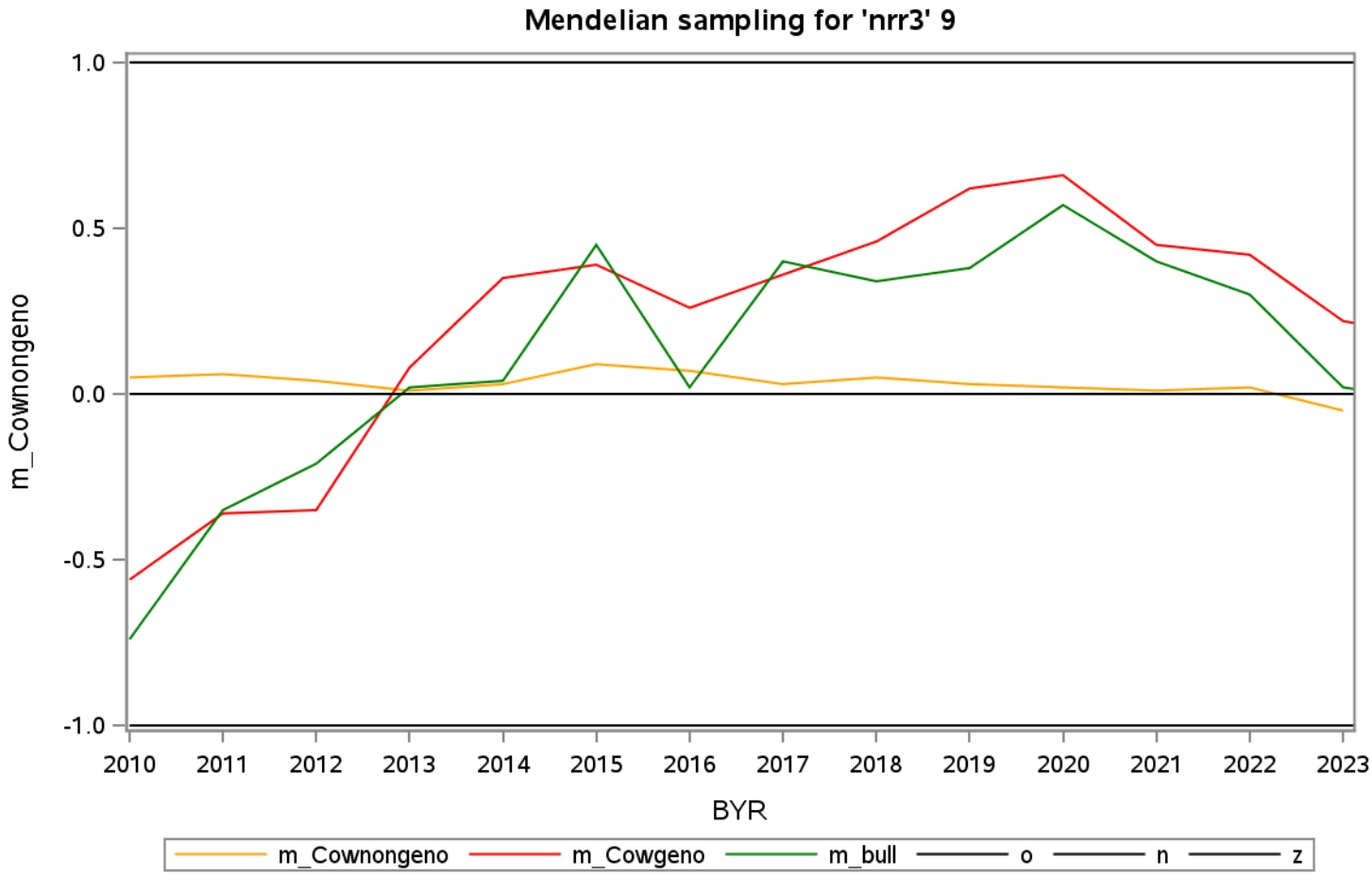
Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	0.01	-0.64	-0.84	100540	3545	987
2	2011	0.05	-0.37	-0.38	95864	6101	1808
3	2012	0.05	-0.36	-0.20	86133	6868	2317
4	2013	0.05	0.19	0.09	81389	7351	2338
5	2014	0.06	0.37	0.14	73861	8258	2322
6	2015	0.10	0.43	0.48	63368	10921	2369
7	2016	0.09	0.27	0.08	53603	14960	2336
8	2017	0.03	0.42	0.43	45811	17902	2607
9	2018	0.03	0.53	0.29	38934	20167	2555
10	2019	0.03	0.55	0.27	33537	20566	2445
11	2020	0.01	0.62	0.54	30260	22785	2828
12	2021	0.01	0.54	0.36	26036	23109	2771
13	2022	0.03	0.51	0.39	14150	23920	2573
14	2023	-0.15	0.27	0.07	10	21359	2269
15	2024	.	0.16	-0.05	.	4805	667



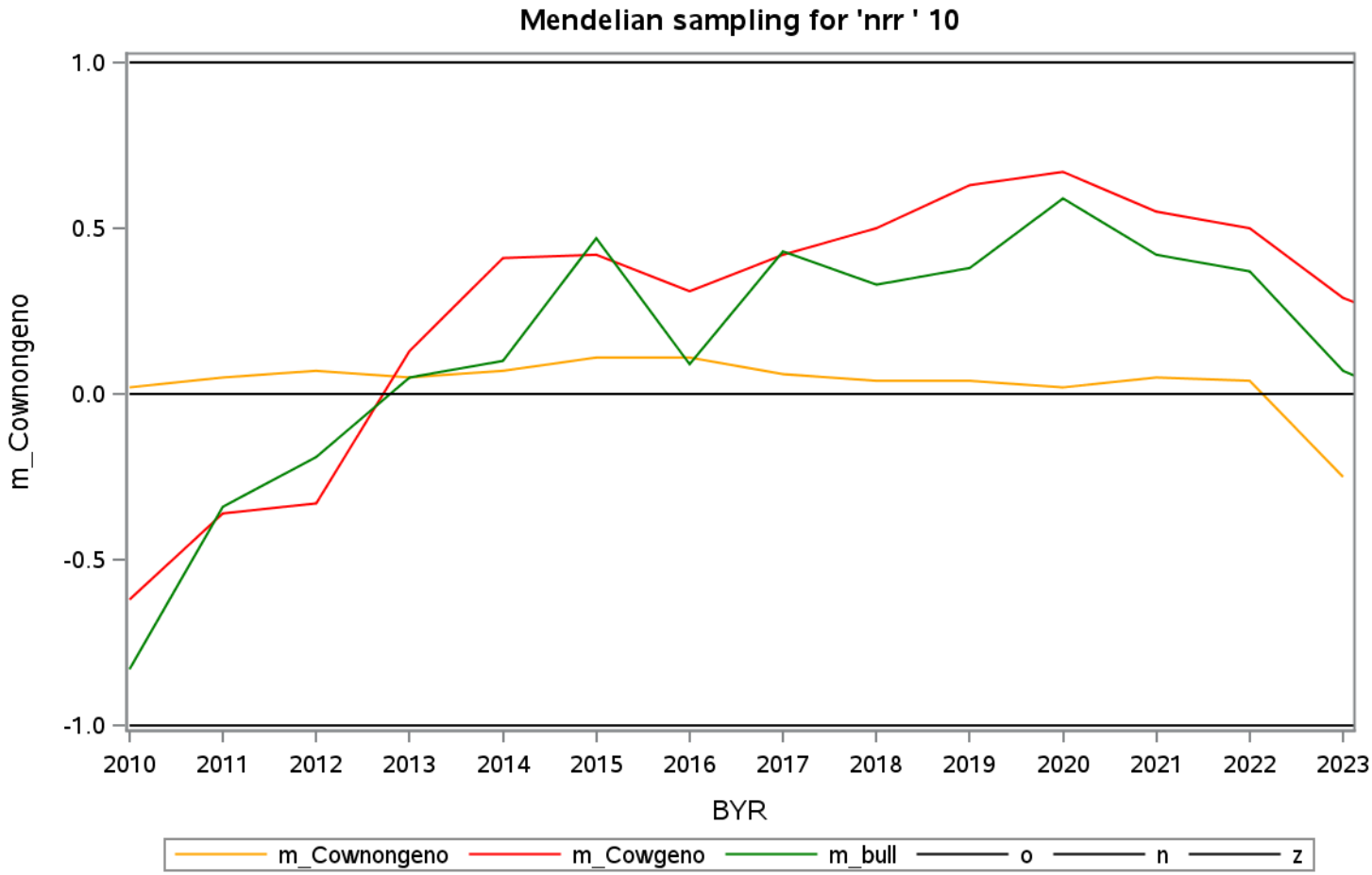
Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	0.02	-0.64	-0.88	100540	3545	987
2	2011	0.05	-0.39	-0.33	95864	6101	1808
3	2012	0.06	-0.35	-0.27	86133	6868	2317
4	2013	0.04	0.09	0.04	81389	7351	2338
5	2014	0.05	0.40	0.08	73861	8258	2322
6	2015	0.08	0.40	0.46	63368	10921	2369
7	2016	0.08	0.29	0.05	53603	14960	2336
8	2017	0.05	0.43	0.46	45811	17902	2607
9	2018	0.07	0.51	0.37	38934	20167	2555
10	2019	0.06	0.69	0.43	33537	20566	2445
11	2020	0.08	0.75	0.59	30260	22785	2828
12	2021	0.05	0.55	0.42	26036	23109	2771
13	2022	0.00	0.44	0.32	14150	23920	2573
14	2023	0.00	0.25	0.05	10	21359	2269
15	2024	.	0.18	-0.07	.	4805	667



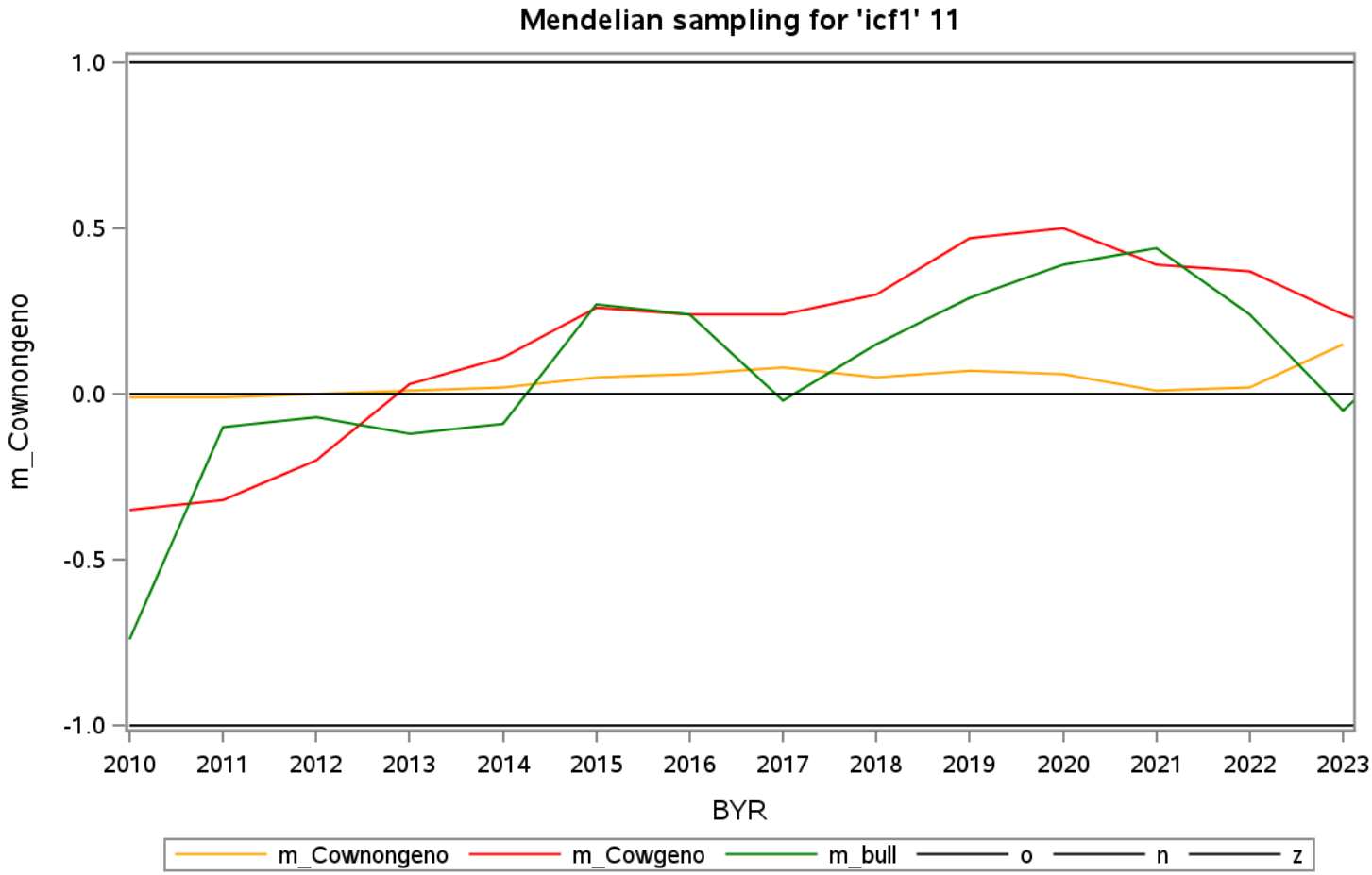
Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	0.05	-0.56	-0.74	100540	3545	987
2	2011	0.06	-0.36	-0.35	95864	6101	1808
3	2012	0.04	-0.35	-0.21	86133	6868	2317
4	2013	0.01	0.08	0.02	81389	7351	2338
5	2014	0.03	0.35	0.04	73861	8258	2322
6	2015	0.09	0.39	0.45	63368	10921	2369
7	2016	0.07	0.26	0.02	53603	14960	2336
8	2017	0.03	0.36	0.40	45811	17902	2607
9	2018	0.05	0.46	0.34	38934	20167	2555
10	2019	0.03	0.62	0.38	33537	20566	2445
11	2020	0.02	0.66	0.57	30260	22785	2828
12	2021	0.01	0.45	0.40	26036	23109	2771
13	2022	0.02	0.42	0.30	14150	23920	2573
14	2023	-0.05	0.22	0.02	10	21359	2269
15	2024	.	0.17	-0.02	.	4805	667



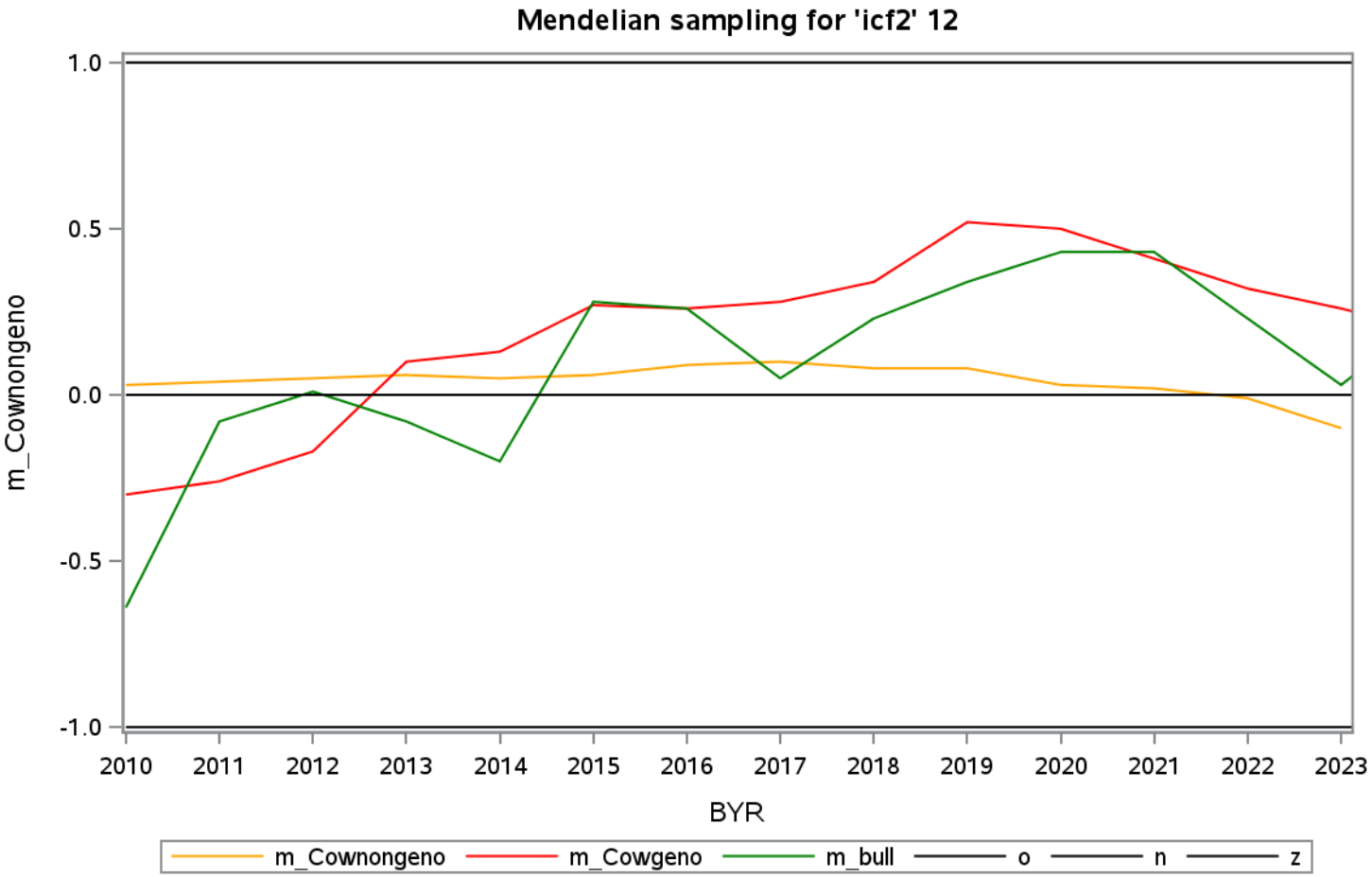
Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	0.02	-0.62	-0.83	100540	3545	987
2	2011	0.05	-0.36	-0.34	95864	6101	1808
3	2012	0.07	-0.33	-0.19	86133	6868	2317
4	2013	0.05	0.13	0.05	81389	7351	2338
5	2014	0.07	0.41	0.10	73861	8258	2322
6	2015	0.11	0.42	0.47	63368	10921	2369
7	2016	0.11	0.31	0.09	53603	14960	2336
8	2017	0.06	0.42	0.43	45811	17902	2607
9	2018	0.04	0.50	0.33	38934	20167	2555
10	2019	0.04	0.63	0.38	33537	20566	2445
11	2020	0.02	0.67	0.59	30260	22785	2828
12	2021	0.05	0.55	0.42	26036	23109	2771
13	2022	0.04	0.50	0.37	14150	23920	2573
14	2023	-0.25	0.29	0.07	10	21359	2269
15	2024	.	0.18	-0.05	.	4805	667



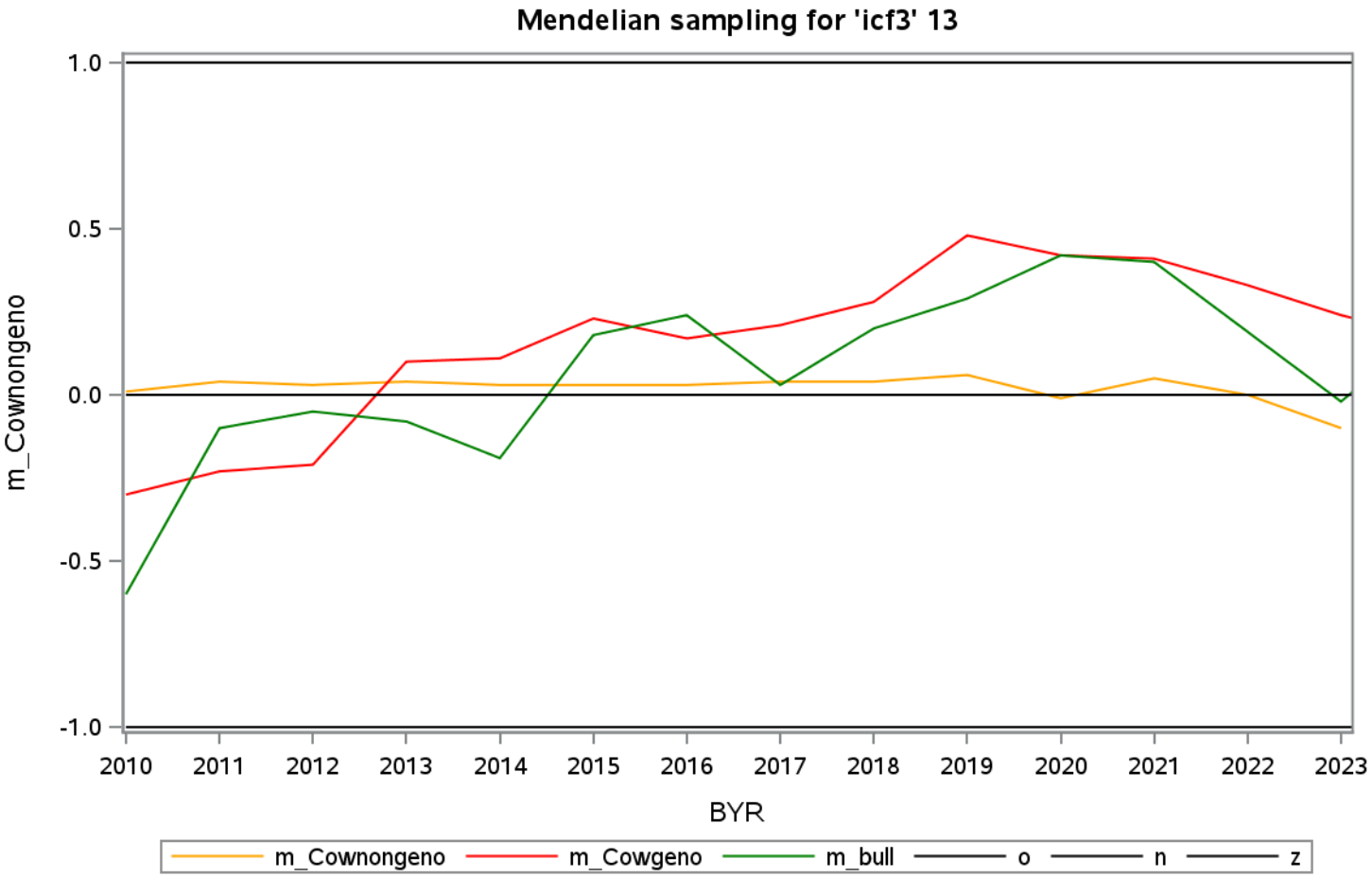
Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	-0.01	-0.35	-0.74	100540	3545	987
2	2011	-0.01	-0.32	-0.10	95864	6101	1808
3	2012	0.00	-0.20	-0.07	86133	6868	2317
4	2013	0.01	0.03	-0.12	81389	7351	2338
5	2014	0.02	0.11	-0.09	73861	8258	2322
6	2015	0.05	0.26	0.27	63368	10921	2369
7	2016	0.06	0.24	0.24	53603	14960	2336
8	2017	0.08	0.24	-0.02	45811	17902	2607
9	2018	0.05	0.30	0.15	38934	20167	2555
10	2019	0.07	0.47	0.29	33537	20566	2445
11	2020	0.06	0.50	0.39	30260	22785	2828
12	2021	0.01	0.39	0.44	26036	23109	2771
13	2022	0.02	0.37	0.24	14150	23920	2573
14	2023	0.15	0.24	-0.05	10	21359	2269
15	2024	.	0.15	0.21	.	4805	667



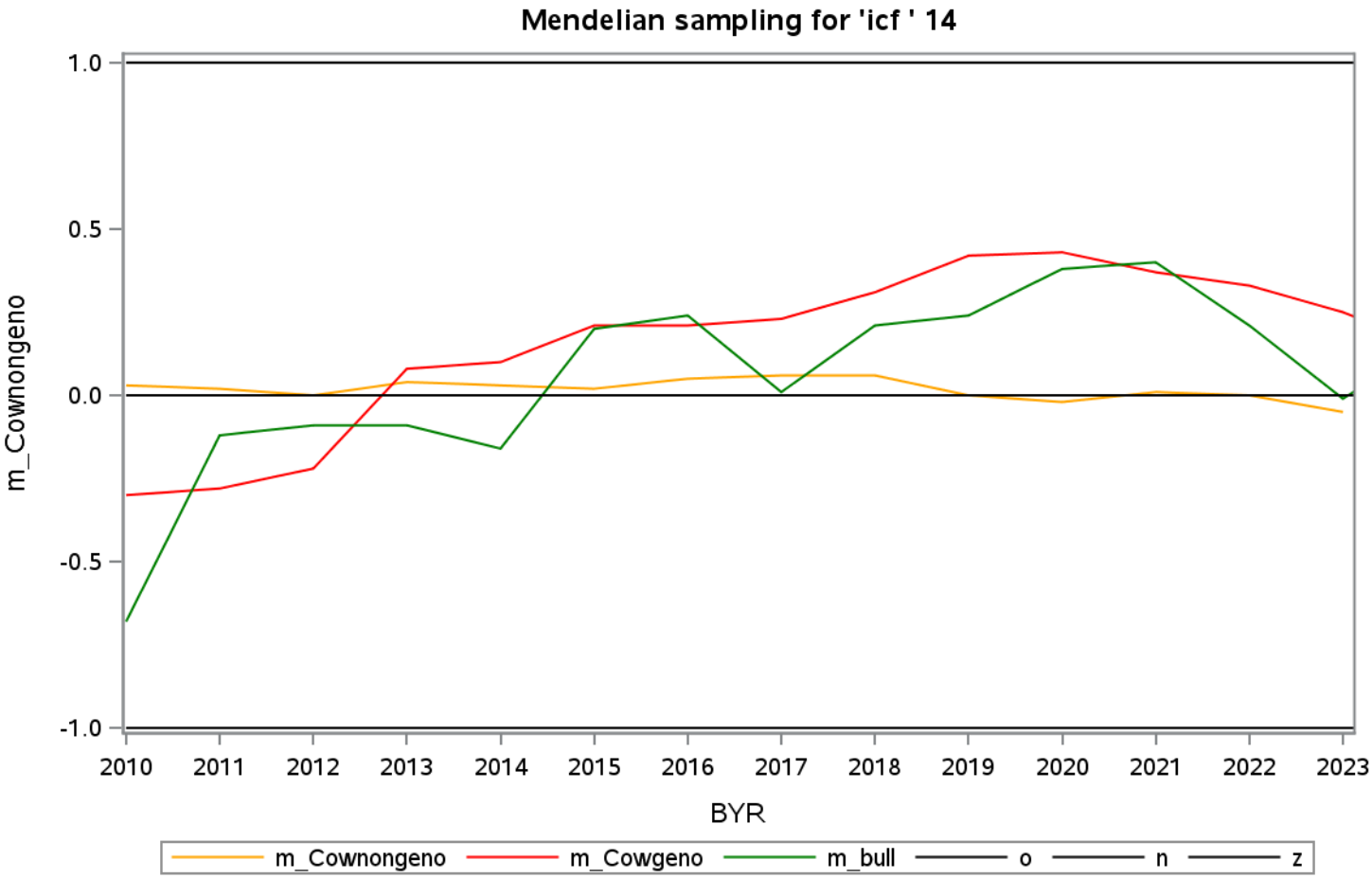
Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	0.03	-0.30	-0.64	100540	3545	987
2	2011	0.04	-0.26	-0.08	95864	6101	1808
3	2012	0.05	-0.17	0.01	86133	6868	2317
4	2013	0.06	0.10	-0.08	81389	7351	2338
5	2014	0.05	0.13	-0.20	73861	8258	2322
6	2015	0.06	0.27	0.28	63368	10921	2369
7	2016	0.09	0.26	0.26	53603	14960	2336
8	2017	0.10	0.28	0.05	45811	17902	2607
9	2018	0.08	0.34	0.23	38934	20167	2555
10	2019	0.08	0.52	0.34	33537	20566	2445
11	2020	0.03	0.50	0.43	30260	22785	2828
12	2021	0.02	0.41	0.43	26036	23109	2771
13	2022	-0.01	0.32	0.23	14150	23920	2573
14	2023	-0.10	0.26	0.03	10	21359	2269
15	2024	.	0.19	0.25	.	4805	667



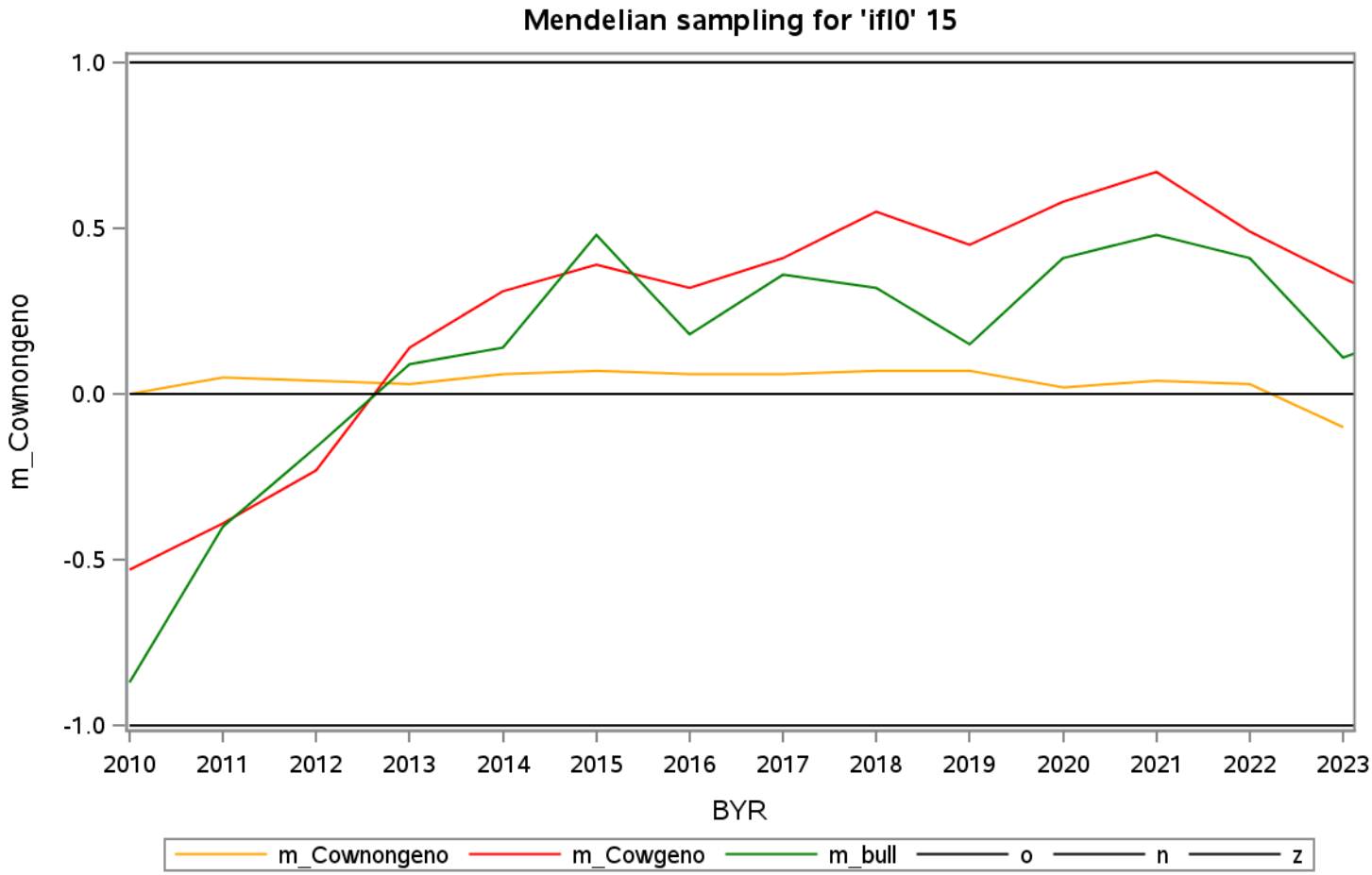
Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	0.01	-0.30	-0.60	100540	3545	987
2	2011	0.04	-0.23	-0.10	95864	6101	1808
3	2012	0.03	-0.21	-0.05	86133	6868	2317
4	2013	0.04	0.10	-0.08	81389	7351	2338
5	2014	0.03	0.11	-0.19	73861	8258	2322
6	2015	0.03	0.23	0.18	63368	10921	2369
7	2016	0.03	0.17	0.24	53603	14960	2336
8	2017	0.04	0.21	0.03	45811	17902	2607
9	2018	0.04	0.28	0.20	38934	20167	2555
10	2019	0.06	0.48	0.29	33537	20566	2445
11	2020	-0.01	0.42	0.42	30260	22785	2828
12	2021	0.05	0.41	0.40	26036	23109	2771
13	2022	0.00	0.33	0.19	14150	23920	2573
14	2023	-0.10	0.24	-0.02	10	21359	2269
15	2024	.	0.17	0.22	.	4805	667



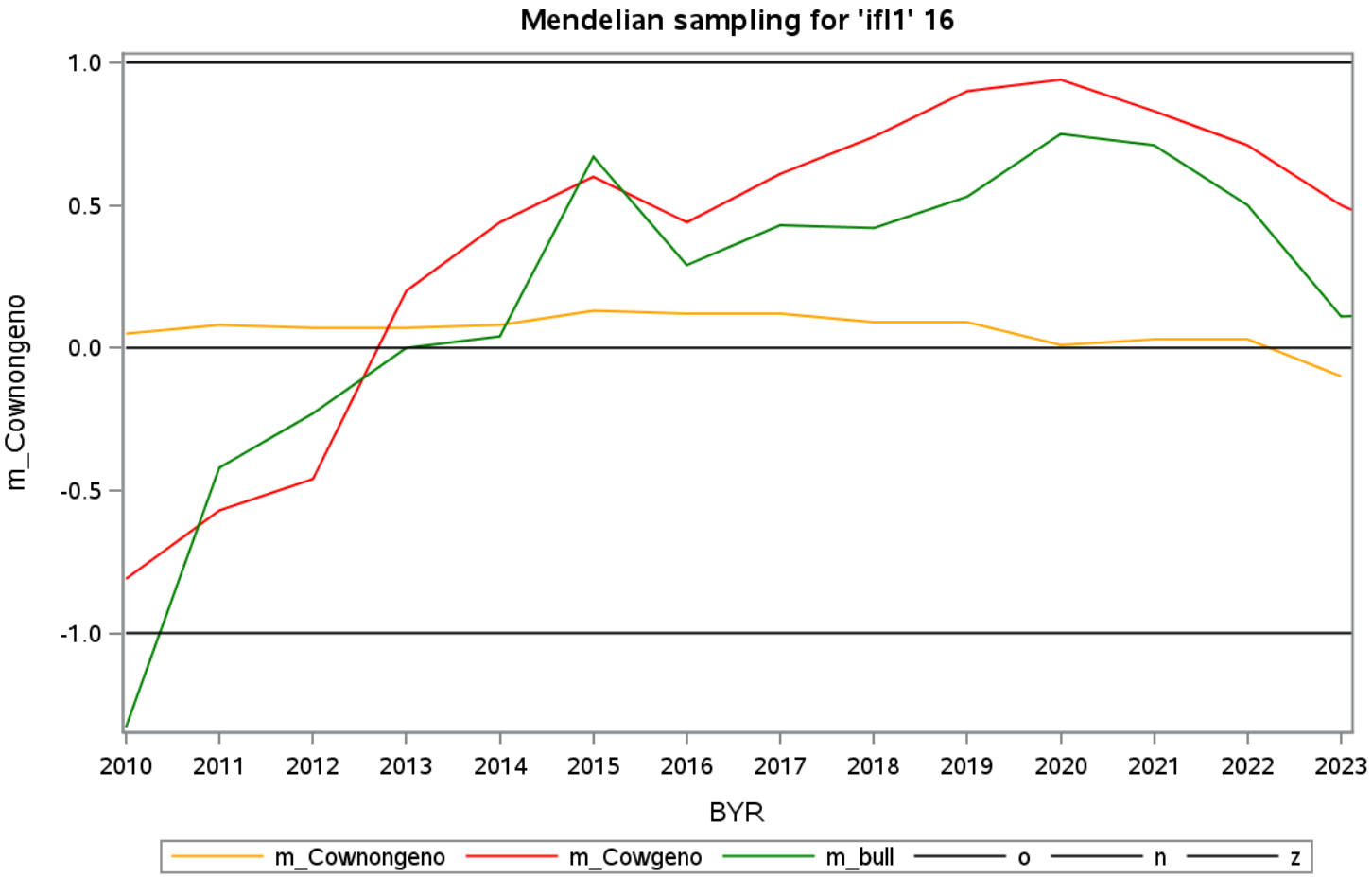
Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	0.03	-0.30	-0.68	100540	3545	987
2	2011	0.02	-0.28	-0.12	95864	6101	1808
3	2012	0.00	-0.22	-0.09	86133	6868	2317
4	2013	0.04	0.08	-0.09	81389	7351	2338
5	2014	0.03	0.10	-0.16	73861	8258	2322
6	2015	0.02	0.21	0.20	63368	10921	2369
7	2016	0.05	0.21	0.24	53603	14960	2336
8	2017	0.06	0.23	0.01	45811	17902	2607
9	2018	0.06	0.31	0.21	38934	20167	2555
10	2019	0.00	0.42	0.24	33537	20566	2445
11	2020	-0.02	0.43	0.38	30260	22785	2828
12	2021	0.01	0.37	0.40	26036	23109	2771
13	2022	0.00	0.33	0.21	14150	23920	2573
14	2023	-0.05	0.25	-0.01	10	21359	2269
15	2024	.	0.14	0.17	.	4805	667



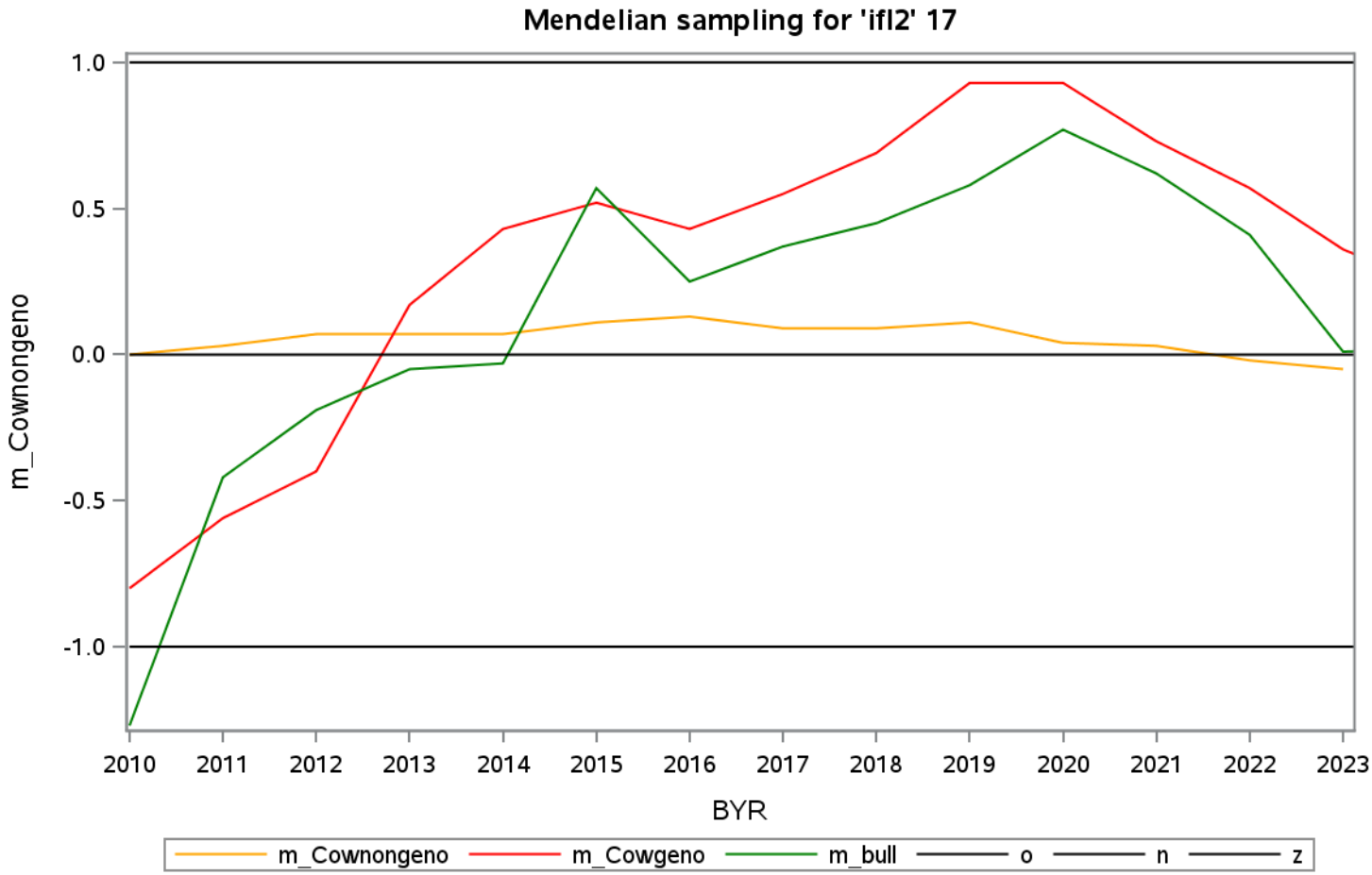
Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	0.00	-0.53	-0.87	100540	3545	987
2	2011	0.05	-0.39	-0.40	95864	6101	1808
3	2012	0.04	-0.23	-0.16	86133	6868	2317
4	2013	0.03	0.14	0.09	81389	7351	2338
5	2014	0.06	0.31	0.14	73861	8258	2322
6	2015	0.07	0.39	0.48	63368	10921	2369
7	2016	0.06	0.32	0.18	53603	14960	2336
8	2017	0.06	0.41	0.36	45811	17902	2607
9	2018	0.07	0.55	0.32	38934	20167	2555
10	2019	0.07	0.45	0.15	33537	20566	2445
11	2020	0.02	0.58	0.41	30260	22785	2828
12	2021	0.04	0.67	0.48	26036	23109	2771
13	2022	0.03	0.49	0.41	14150	23920	2573
14	2023	-0.10	0.35	0.11	10	21359	2269
15	2024	.	0.22	0.21	.	4805	667



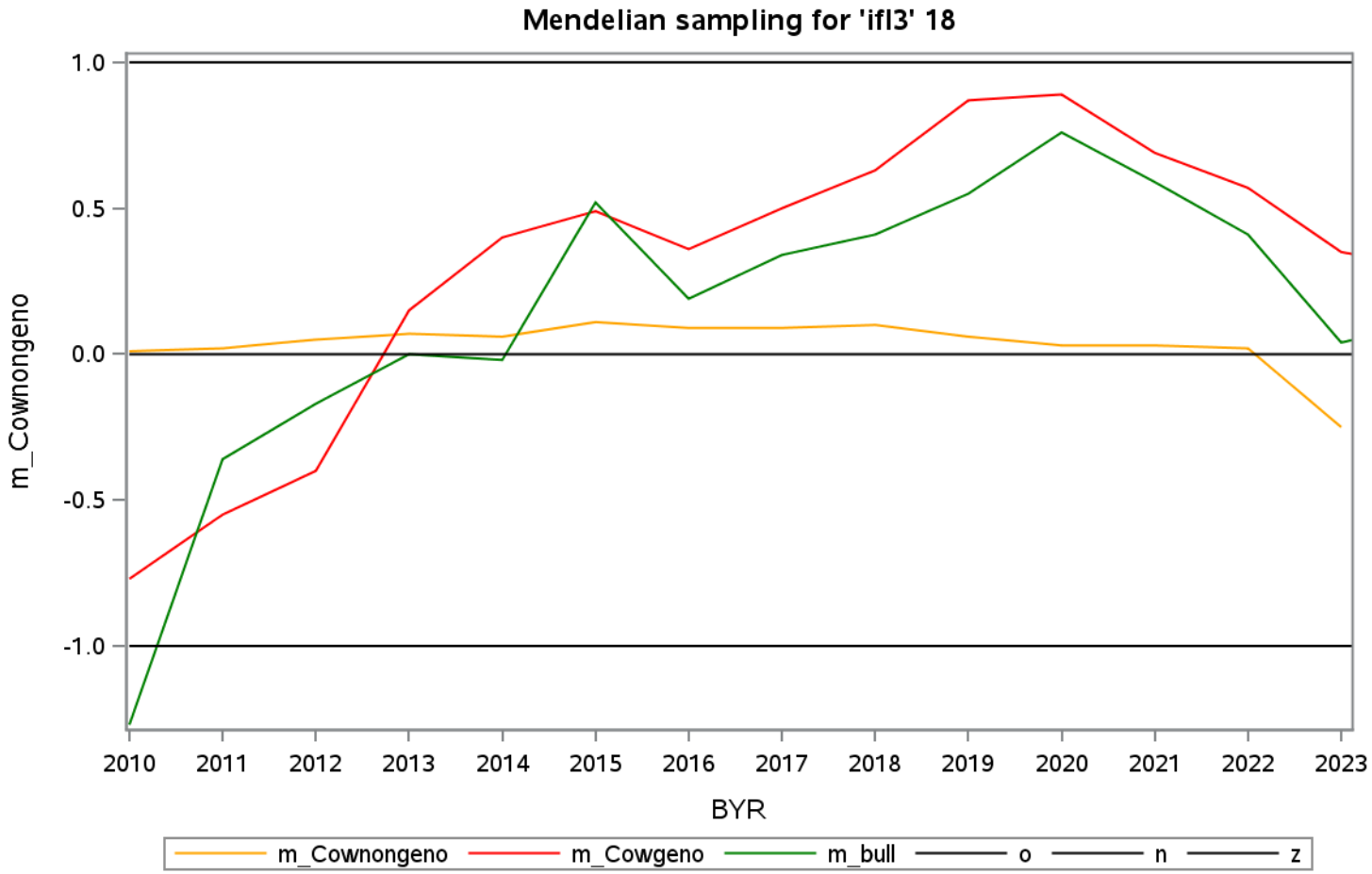
Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	0.05	-0.81	-1.33	100540	3545	987
2	2011	0.08	-0.57	-0.42	95864	6101	1808
3	2012	0.07	-0.46	-0.23	86133	6868	2317
4	2013	0.07	0.20	0.00	81389	7351	2338
5	2014	0.08	0.44	0.04	73861	8258	2322
6	2015	0.13	0.60	0.67	63368	10921	2369
7	2016	0.12	0.44	0.29	53603	14960	2336
8	2017	0.12	0.61	0.43	45811	17902	2607
9	2018	0.09	0.74	0.42	38934	20167	2555
10	2019	0.09	0.90	0.53	33537	20566	2445
11	2020	0.01	0.94	0.75	30260	22785	2828
12	2021	0.03	0.83	0.71	26036	23109	2771
13	2022	0.03	0.71	0.50	14150	23920	2573
14	2023	-0.10	0.50	0.11	10	21359	2269
15	2024	.	0.36	0.12	.	4805	667



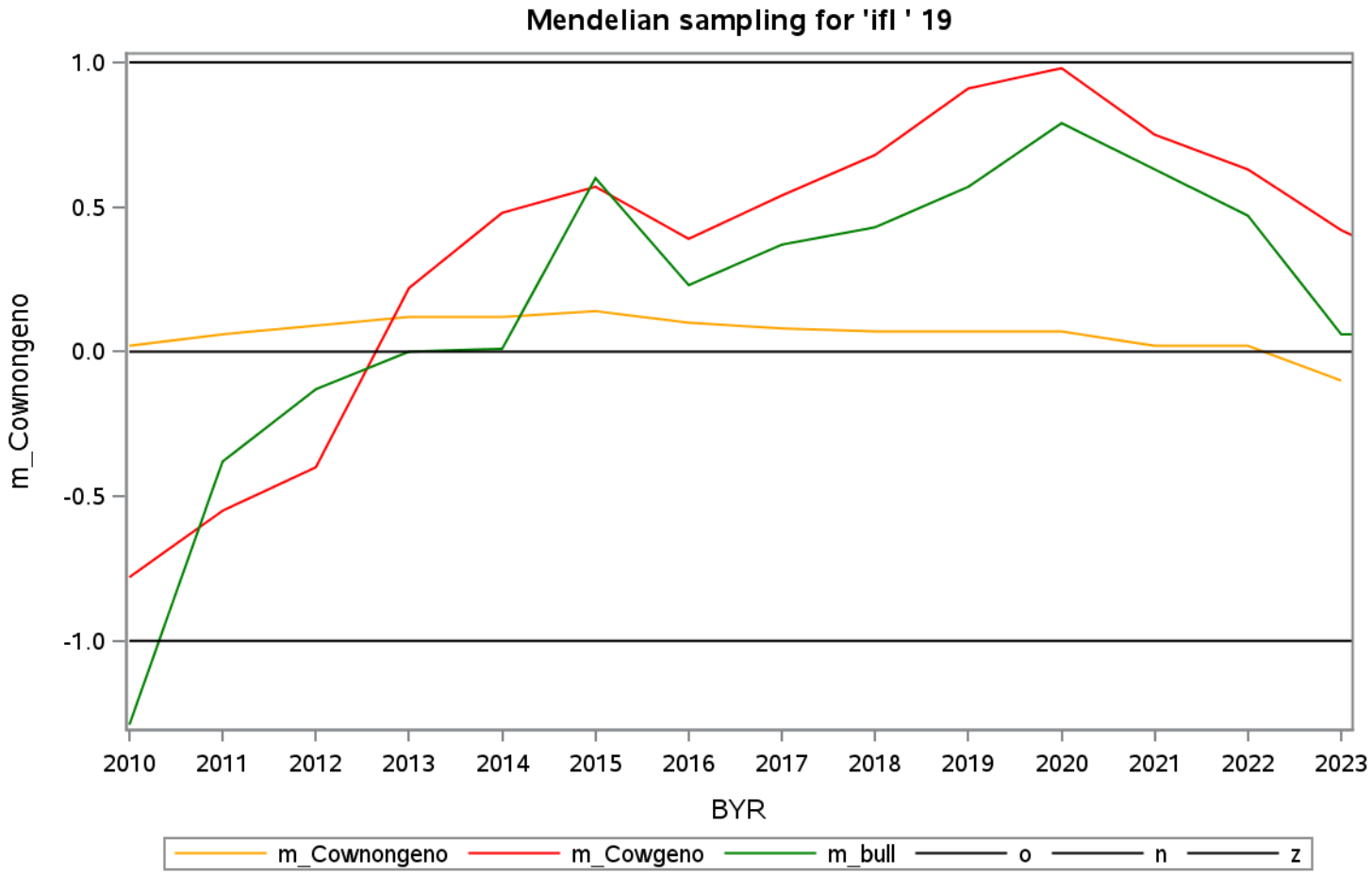
Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	0.00	-0.80	-1.27	100540	3545	987
2	2011	0.03	-0.56	-0.42	95864	6101	1808
3	2012	0.07	-0.40	-0.19	86133	6868	2317
4	2013	0.07	0.17	-0.05	81389	7351	2338
5	2014	0.07	0.43	-0.03	73861	8258	2322
6	2015	0.11	0.52	0.57	63368	10921	2369
7	2016	0.13	0.43	0.25	53603	14960	2336
8	2017	0.09	0.55	0.37	45811	17902	2607
9	2018	0.09	0.69	0.45	38934	20167	2555
10	2019	0.11	0.93	0.58	33537	20566	2445
11	2020	0.04	0.93	0.77	30260	22785	2828
12	2021	0.03	0.73	0.62	26036	23109	2771
13	2022	-0.02	0.57	0.41	14150	23920	2573
14	2023	-0.05	0.36	0.01	10	21359	2269
15	2024	.	0.23	0.02	.	4805	667



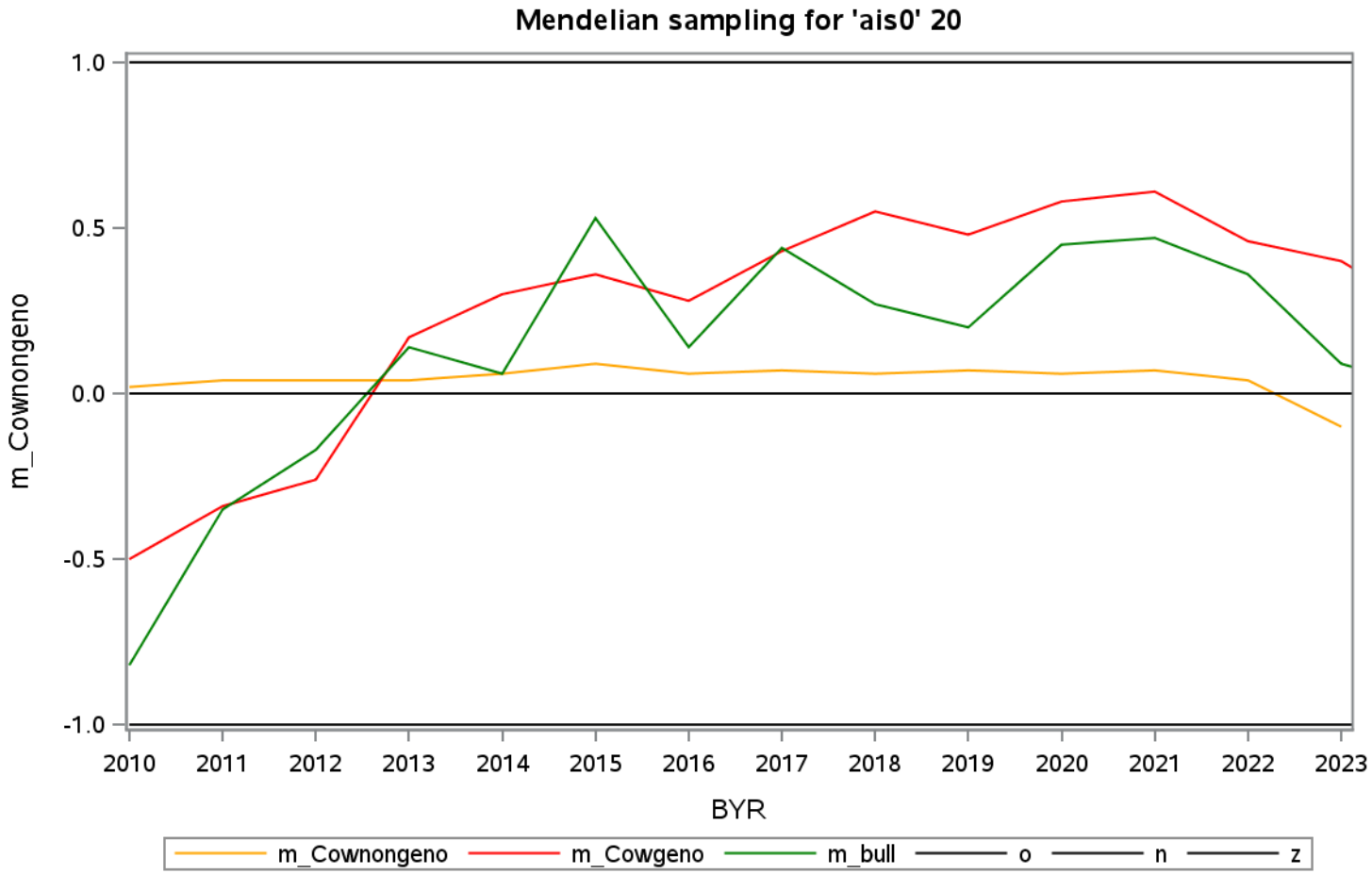
Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	0.01	-0.77	-1.27	100540	3545	987
2	2011	0.02	-0.55	-0.36	95864	6101	1808
3	2012	0.05	-0.40	-0.17	86133	6868	2317
4	2013	0.07	0.15	0.00	81389	7351	2338
5	2014	0.06	0.40	-0.02	73861	8258	2322
6	2015	0.11	0.49	0.52	63368	10921	2369
7	2016	0.09	0.36	0.19	53603	14960	2336
8	2017	0.09	0.50	0.34	45811	17902	2607
9	2018	0.10	0.63	0.41	38934	20167	2555
10	2019	0.06	0.87	0.55	33537	20566	2445
11	2020	0.03	0.89	0.76	30260	22785	2828
12	2021	0.03	0.69	0.59	26036	23109	2771
13	2022	0.02	0.57	0.41	14150	23920	2573
14	2023	-0.25	0.35	0.04	10	21359	2269
15	2024	.	0.29	0.11	.	4805	667



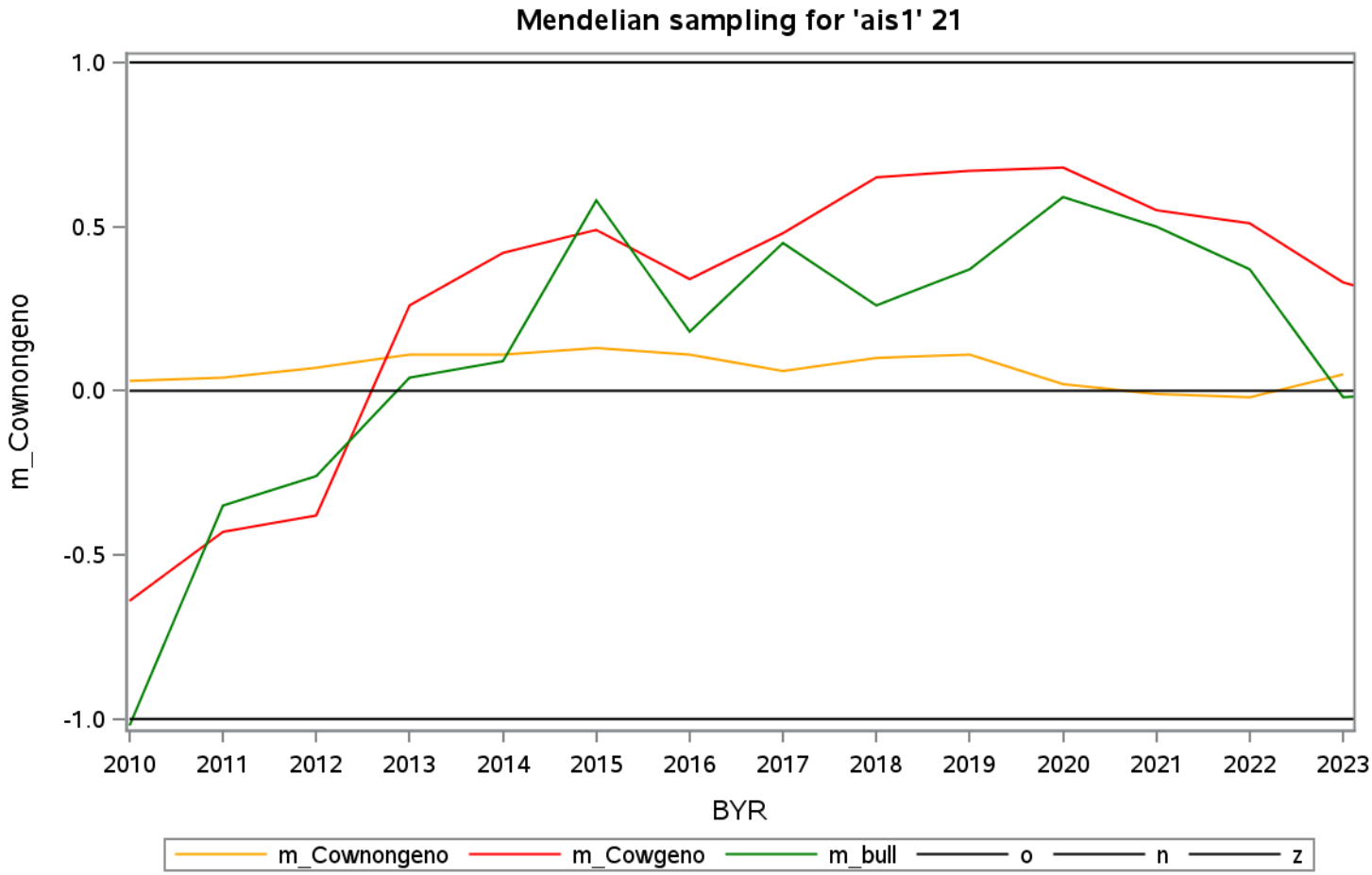
Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	0.02	-0.78	-1.29	100540	3545	987
2	2011	0.06	-0.55	-0.38	95864	6101	1808
3	2012	0.09	-0.40	-0.13	86133	6868	2317
4	2013	0.12	0.22	0.00	81389	7351	2338
5	2014	0.12	0.48	0.01	73861	8258	2322
6	2015	0.14	0.57	0.60	63368	10921	2369
7	2016	0.10	0.39	0.23	53603	14960	2336
8	2017	0.08	0.54	0.37	45811	17902	2607
9	2018	0.07	0.68	0.43	38934	20167	2555
10	2019	0.07	0.91	0.57	33537	20566	2445
11	2020	0.07	0.98	0.79	30260	22785	2828
12	2021	0.02	0.75	0.63	26036	23109	2771
13	2022	0.02	0.63	0.47	14150	23920	2573
14	2023	-0.10	0.42	0.06	10	21359	2269
15	2024	.	0.27	0.06	.	4805	667



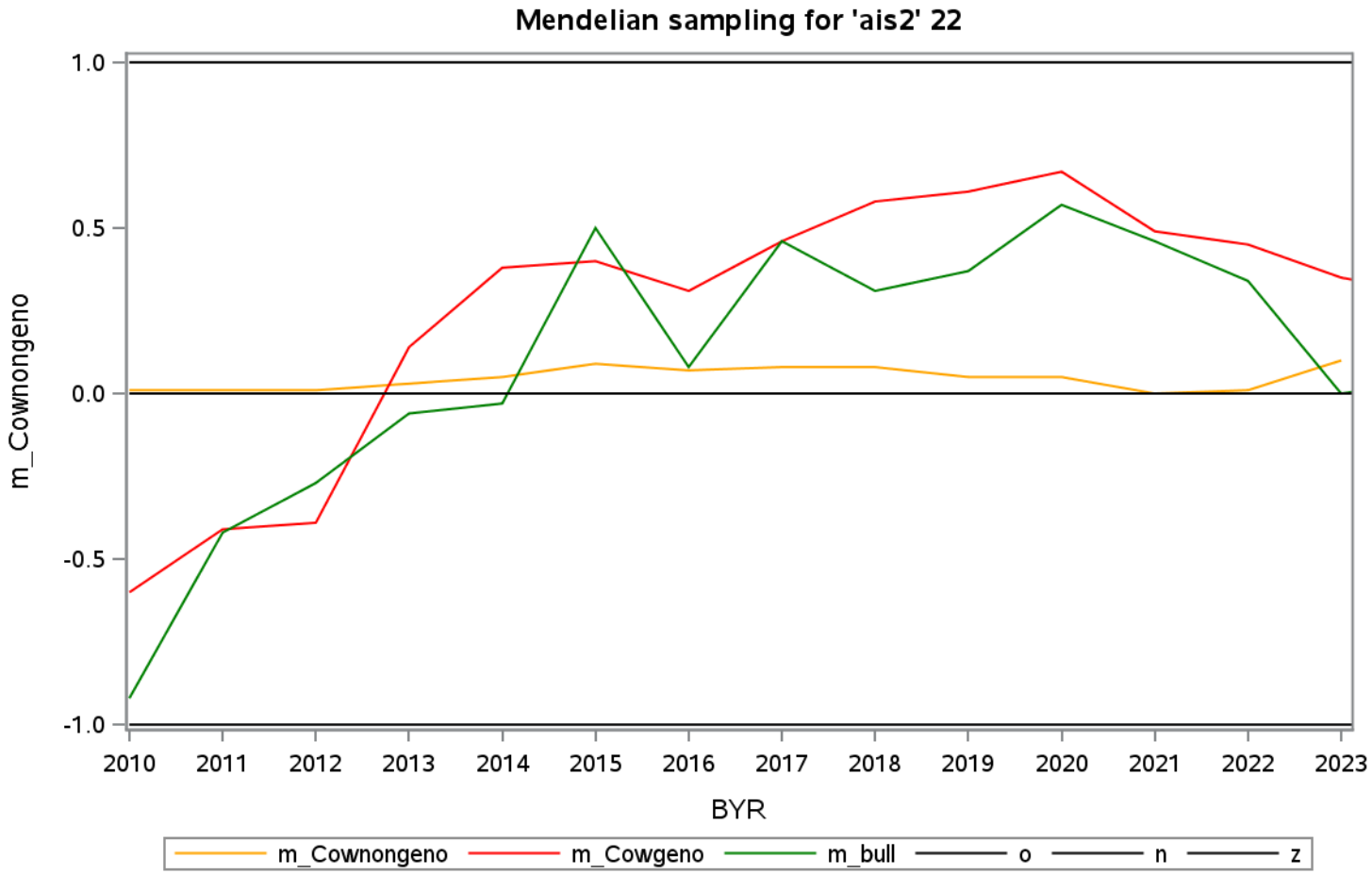
Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	0.02	-0.50	-0.82	100540	3545	987
2	2011	0.04	-0.34	-0.35	95864	6101	1808
3	2012	0.04	-0.26	-0.17	86133	6868	2317
4	2013	0.04	0.17	0.14	81389	7351	2338
5	2014	0.06	0.30	0.06	73861	8258	2322
6	2015	0.09	0.36	0.53	63368	10921	2369
7	2016	0.06	0.28	0.14	53603	14960	2336
8	2017	0.07	0.43	0.44	45811	17902	2607
9	2018	0.06	0.55	0.27	38934	20167	2555
10	2019	0.07	0.48	0.20	33537	20566	2445
11	2020	0.06	0.58	0.45	30260	22785	2828
12	2021	0.07	0.61	0.47	26036	23109	2771
13	2022	0.04	0.46	0.36	14150	23920	2573
14	2023	-0.10	0.40	0.09	10	21359	2269
15	2024	.	0.23	0.01	.	4805	667



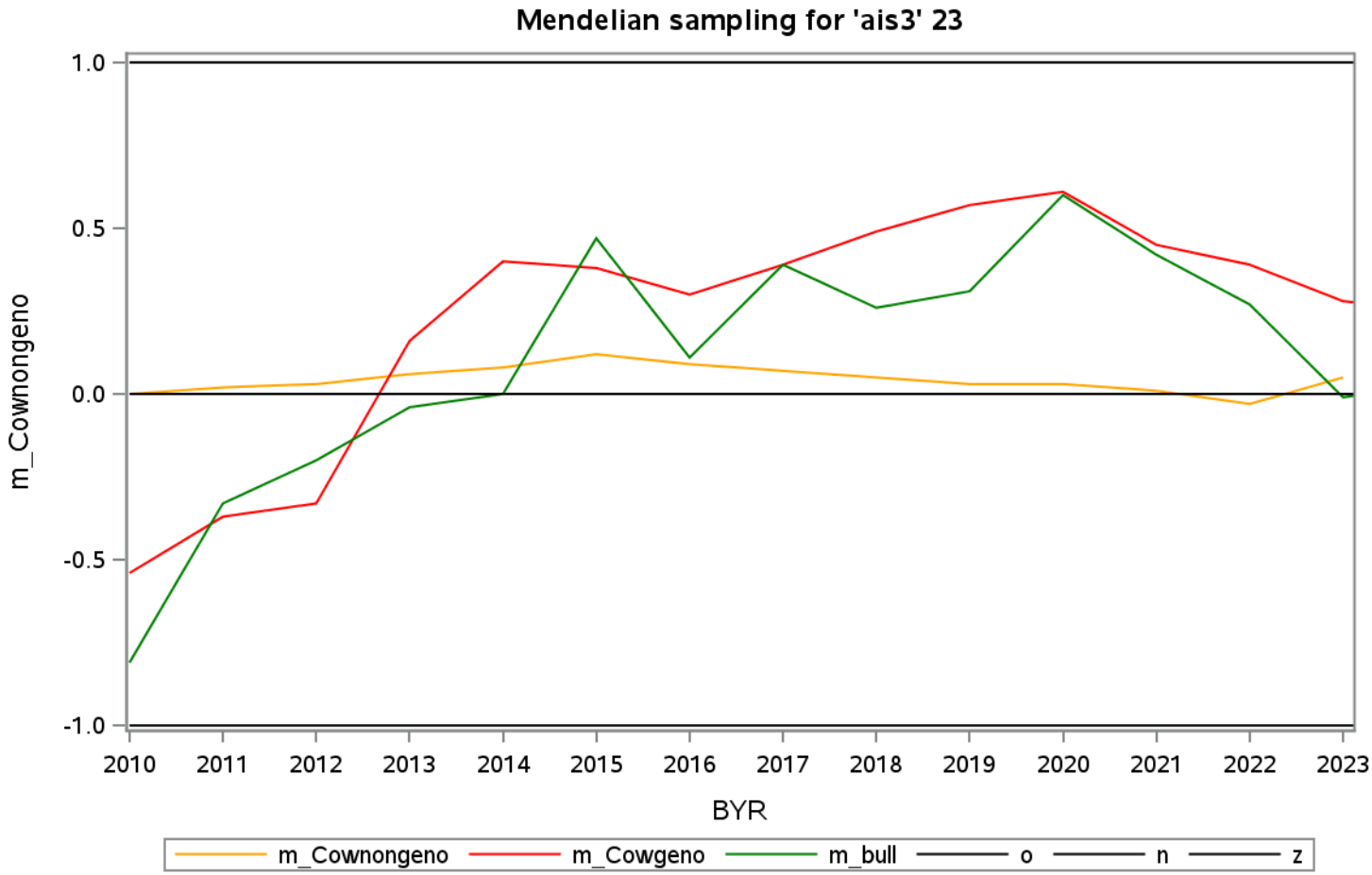
Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	0.03	-0.64	-1.02	100540	3545	987
2	2011	0.04	-0.43	-0.35	95864	6101	1808
3	2012	0.07	-0.38	-0.26	86133	6868	2317
4	2013	0.11	0.26	0.04	81389	7351	2338
5	2014	0.11	0.42	0.09	73861	8258	2322
6	2015	0.13	0.49	0.58	63368	10921	2369
7	2016	0.11	0.34	0.18	53603	14960	2336
8	2017	0.06	0.48	0.45	45811	17902	2607
9	2018	0.10	0.65	0.26	38934	20167	2555
10	2019	0.11	0.67	0.37	33537	20566	2445
11	2020	0.02	0.68	0.59	30260	22785	2828
12	2021	-0.01	0.55	0.50	26036	23109	2771
13	2022	-0.02	0.51	0.37	14150	23920	2573
14	2023	0.05	0.33	-0.02	10	21359	2269
15	2024	.	0.25	0.00	.	4805	667



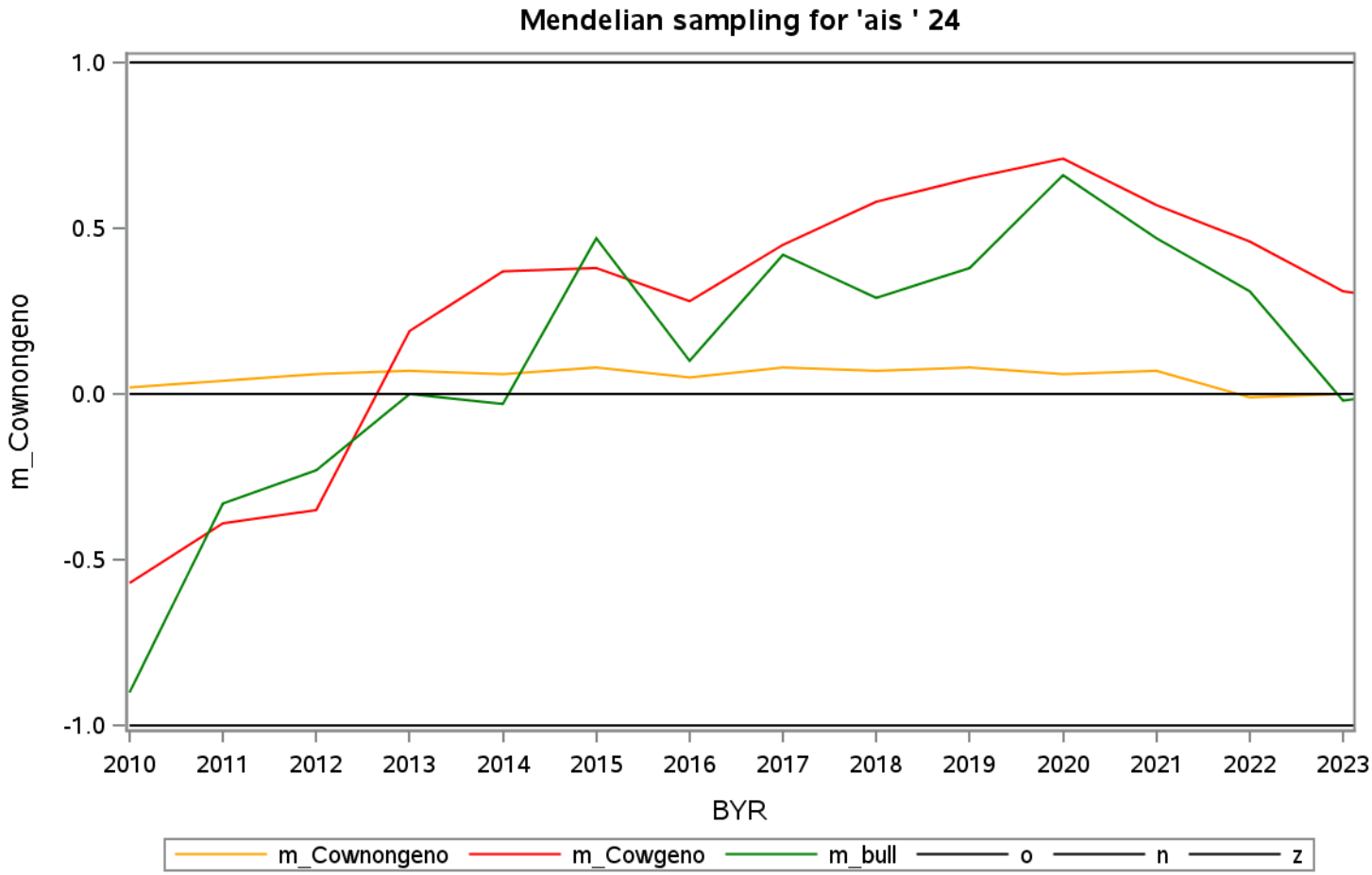
Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	0.01	-0.60	-0.92	100540	3545	987
2	2011	0.01	-0.41	-0.42	95864	6101	1808
3	2012	0.01	-0.39	-0.27	86133	6868	2317
4	2013	0.03	0.14	-0.06	81389	7351	2338
5	2014	0.05	0.38	-0.03	73861	8258	2322
6	2015	0.09	0.40	0.50	63368	10921	2369
7	2016	0.07	0.31	0.08	53603	14960	2336
8	2017	0.08	0.46	0.46	45811	17902	2607
9	2018	0.08	0.58	0.31	38934	20167	2555
10	2019	0.05	0.61	0.37	33537	20566	2445
11	2020	0.05	0.67	0.57	30260	22785	2828
12	2021	0.00	0.49	0.46	26036	23109	2771
13	2022	0.01	0.45	0.34	14150	23920	2573
14	2023	0.10	0.35	0.00	10	21359	2269
15	2024	.	0.30	0.04	.	4805	667



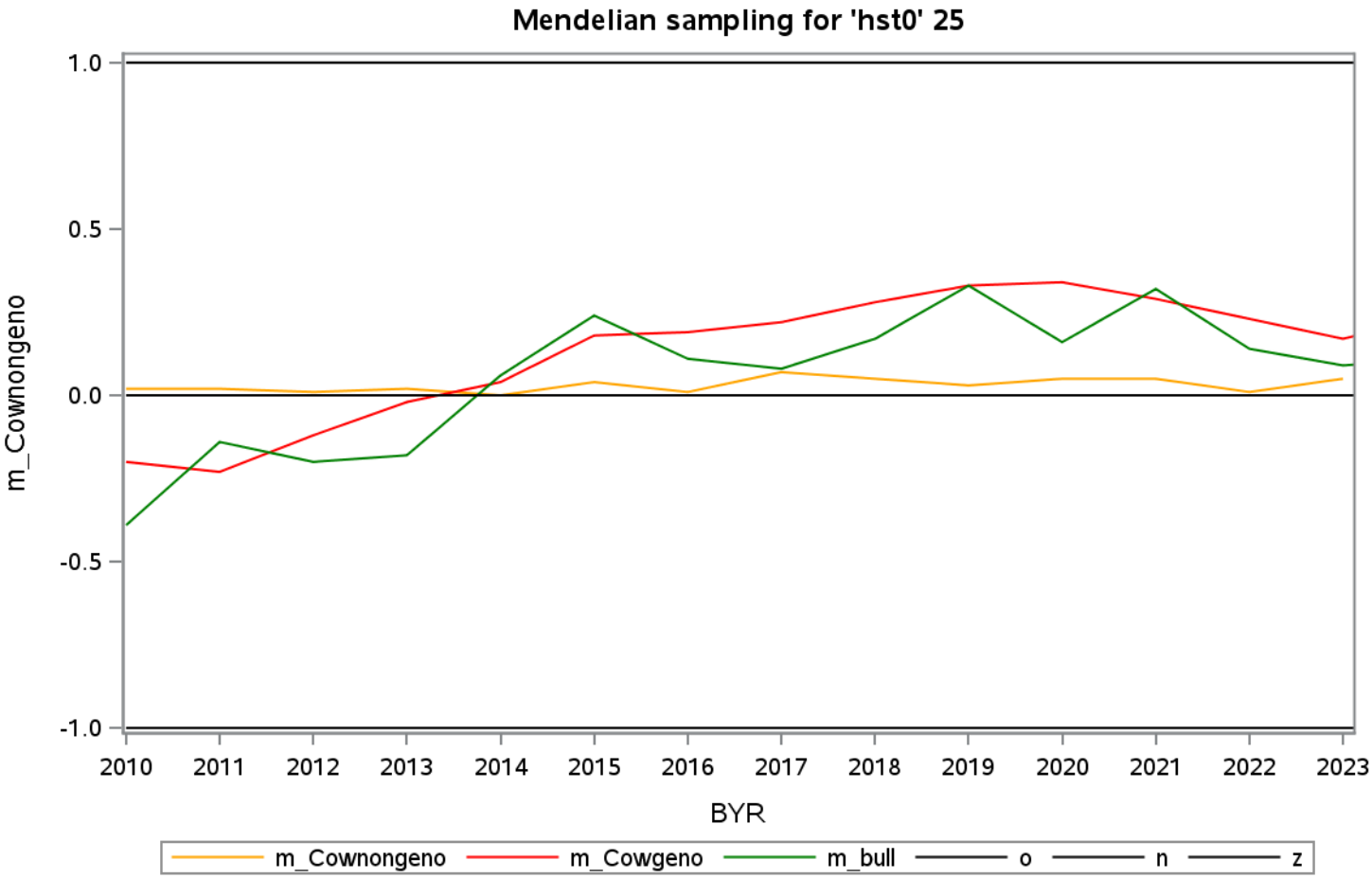
Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	0.00	-0.54	-0.81	100540	3545	987
2	2011	0.02	-0.37	-0.33	95864	6101	1808
3	2012	0.03	-0.33	-0.20	86133	6868	2317
4	2013	0.06	0.16	-0.04	81389	7351	2338
5	2014	0.08	0.40	0.00	73861	8258	2322
6	2015	0.12	0.38	0.47	63368	10921	2369
7	2016	0.09	0.30	0.11	53603	14960	2336
8	2017	0.07	0.39	0.39	45811	17902	2607
9	2018	0.05	0.49	0.26	38934	20167	2555
10	2019	0.03	0.57	0.31	33537	20566	2445
11	2020	0.03	0.61	0.60	30260	22785	2828
12	2021	0.01	0.45	0.42	26036	23109	2771
13	2022	-0.03	0.39	0.27	14150	23920	2573
14	2023	0.05	0.28	-0.01	10	21359	2269
15	2024	.	0.25	0.03	.	4805	667



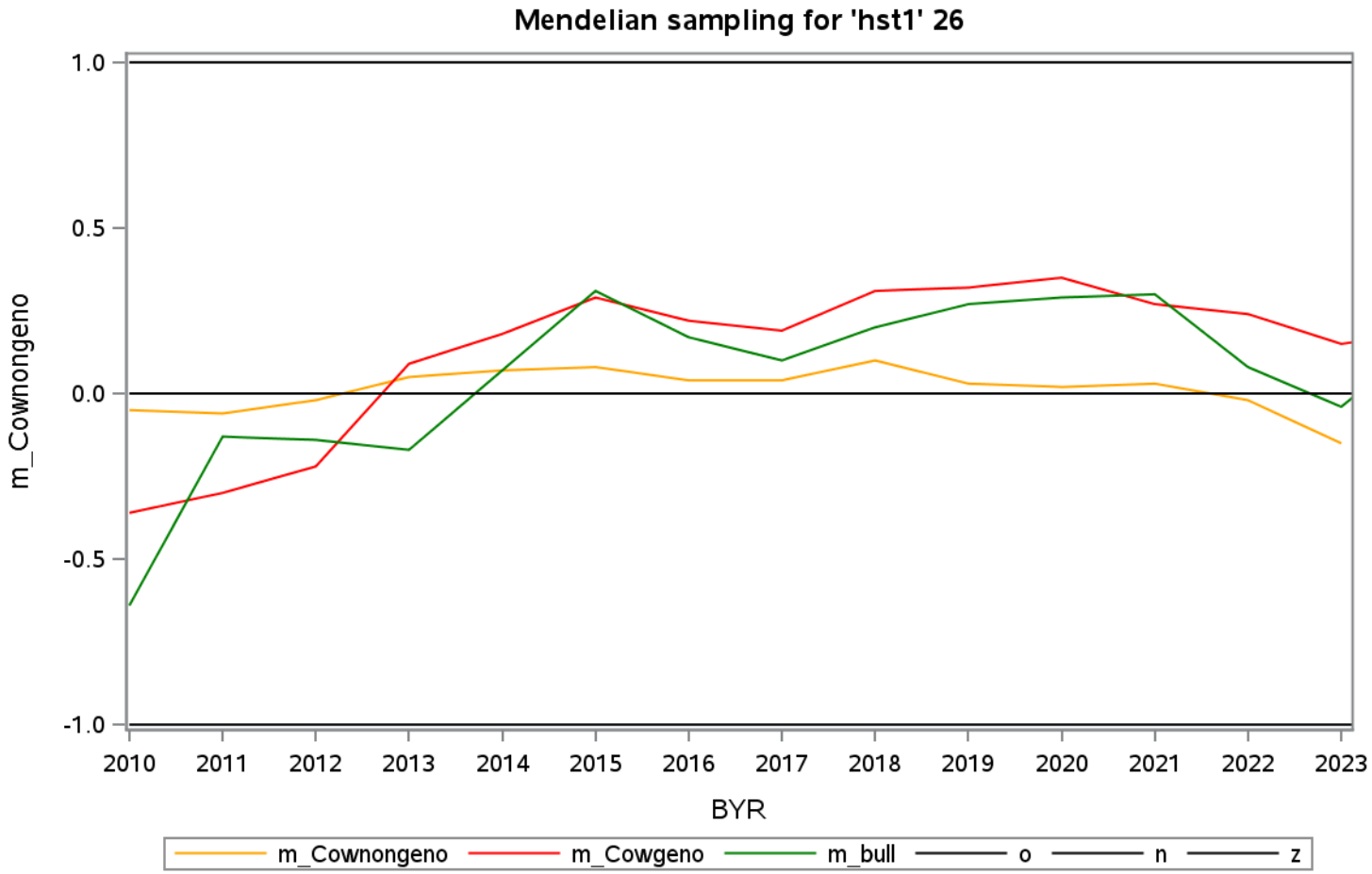
Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	0.02	-0.57	-0.90	100540	3545	987
2	2011	0.04	-0.39	-0.33	95864	6101	1808
3	2012	0.06	-0.35	-0.23	86133	6868	2317
4	2013	0.07	0.19	0.00	81389	7351	2338
5	2014	0.06	0.37	-0.03	73861	8258	2322
6	2015	0.08	0.38	0.47	63368	10921	2369
7	2016	0.05	0.28	0.10	53603	14960	2336
8	2017	0.08	0.45	0.42	45811	17902	2607
9	2018	0.07	0.58	0.29	38934	20167	2555
10	2019	0.08	0.65	0.38	33537	20566	2445
11	2020	0.06	0.71	0.66	30260	22785	2828
12	2021	0.07	0.57	0.47	26036	23109	2771
13	2022	-0.01	0.46	0.31	14150	23920	2573
14	2023	0.00	0.31	-0.02	10	21359	2269
15	2024	.	0.27	0.02	.	4805	667



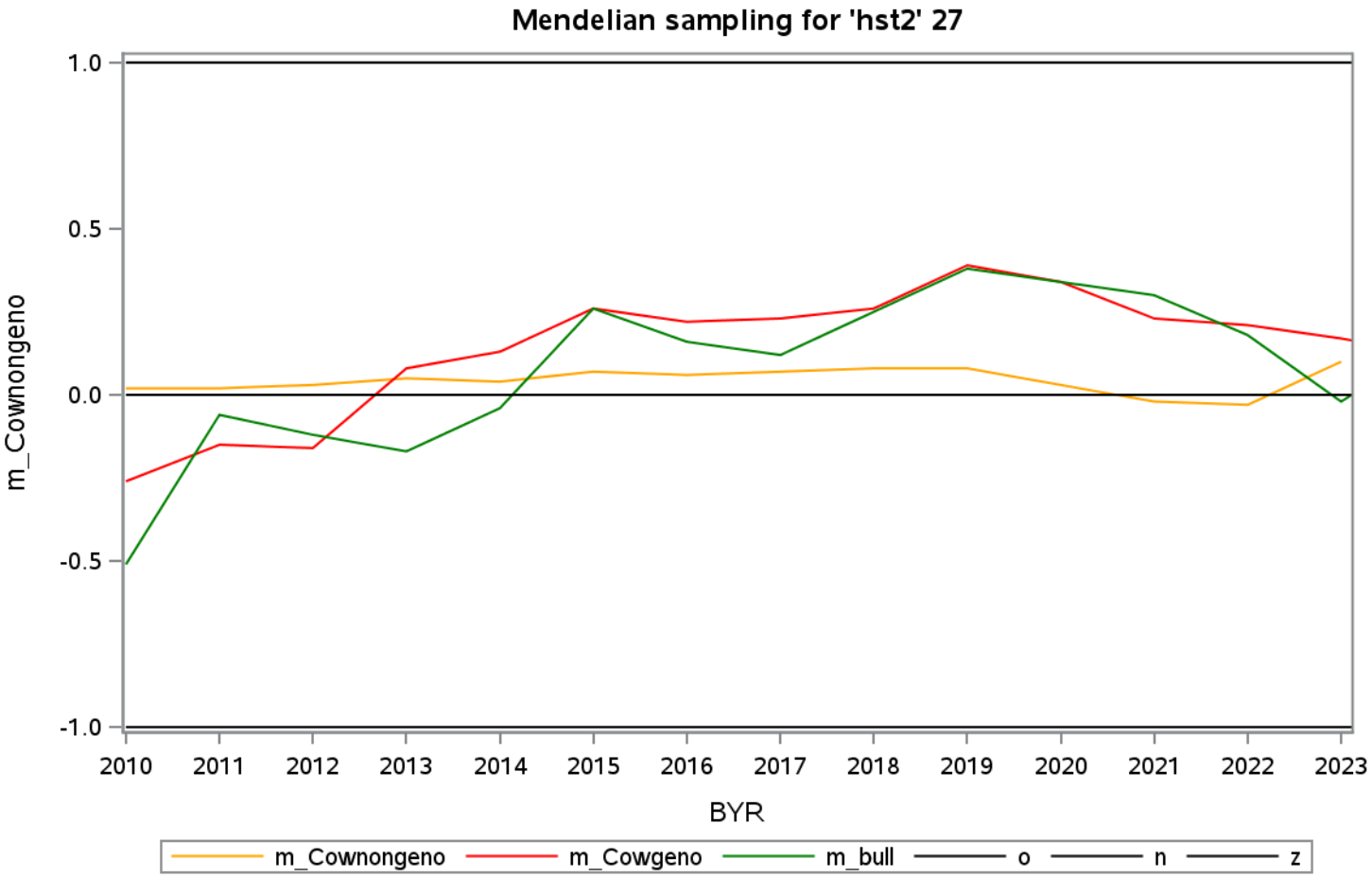
Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	0.02	-0.20	-0.39	100540	3545	987
2	2011	0.02	-0.23	-0.14	95864	6101	1808
3	2012	0.01	-0.12	-0.20	86133	6868	2317
4	2013	0.02	-0.02	-0.18	81389	7351	2338
5	2014	0.00	0.04	0.06	73861	8258	2322
6	2015	0.04	0.18	0.24	63368	10921	2369
7	2016	0.01	0.19	0.11	53603	14960	2336
8	2017	0.07	0.22	0.08	45811	17902	2607
9	2018	0.05	0.28	0.17	38934	20167	2555
10	2019	0.03	0.33	0.33	33537	20566	2445
11	2020	0.05	0.34	0.16	30260	22785	2828
12	2021	0.05	0.29	0.32	26036	23109	2771
13	2022	0.01	0.23	0.14	14150	23920	2573
14	2023	0.05	0.17	0.09	10	21359	2269
15	2024	.	0.24	0.11	.	4805	667



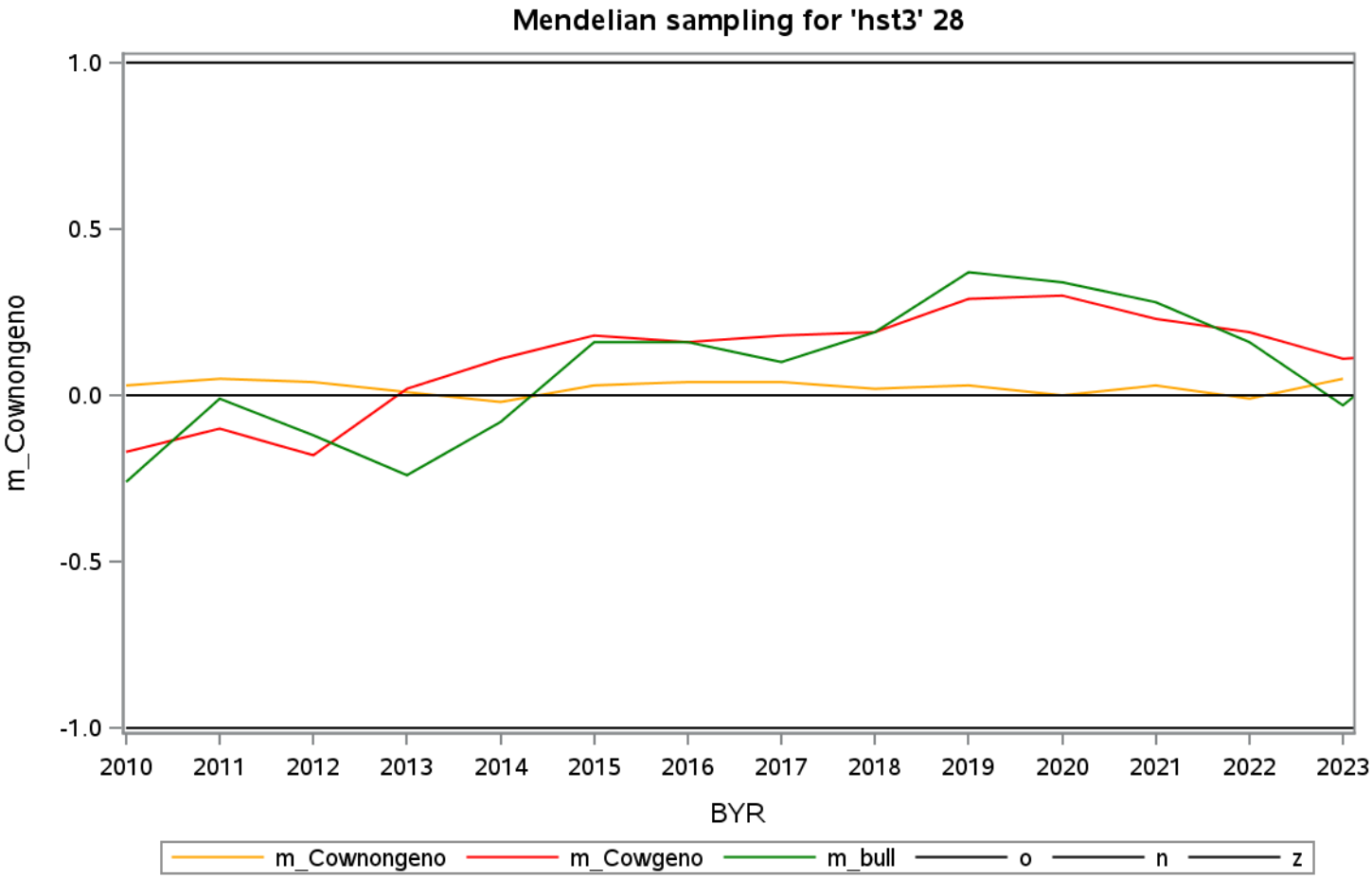
Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	-0.05	-0.36	-0.64	100540	3545	987
2	2011	-0.06	-0.30	-0.13	95864	6101	1808
3	2012	-0.02	-0.22	-0.14	86133	6868	2317
4	2013	0.05	0.09	-0.17	81389	7351	2338
5	2014	0.07	0.18	0.07	73861	8258	2322
6	2015	0.08	0.29	0.31	63368	10921	2369
7	2016	0.04	0.22	0.17	53603	14960	2336
8	2017	0.04	0.19	0.10	45811	17902	2607
9	2018	0.10	0.31	0.20	38934	20167	2555
10	2019	0.03	0.32	0.27	33537	20566	2445
11	2020	0.02	0.35	0.29	30260	22785	2828
12	2021	0.03	0.27	0.30	26036	23109	2771
13	2022	-0.02	0.24	0.08	14150	23920	2573
14	2023	-0.15	0.15	-0.04	10	21359	2269
15	2024	.	0.19	0.19	.	4805	667



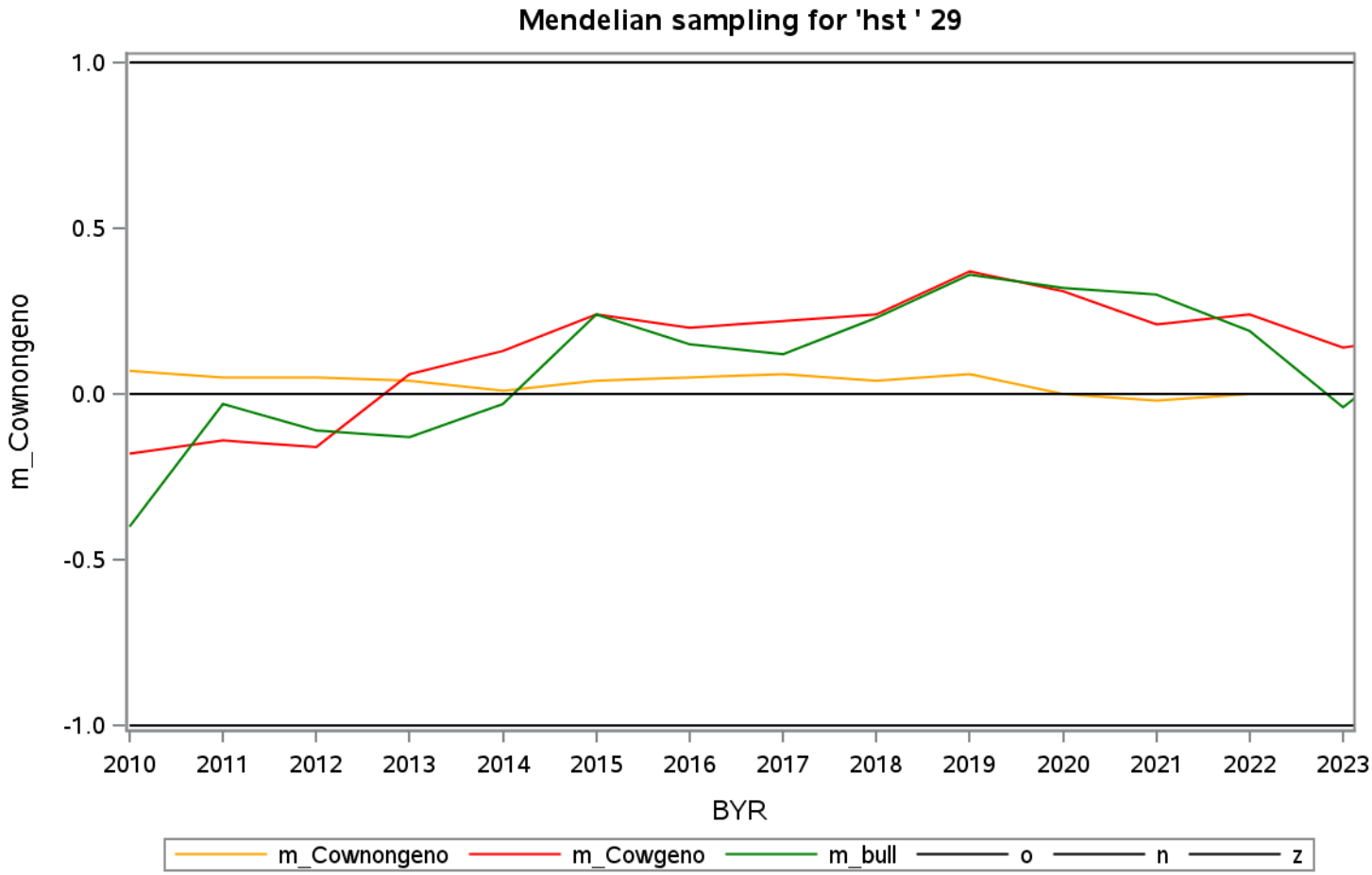
Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	0.02	-0.26	-0.51	100540	3545	987
2	2011	0.02	-0.15	-0.06	95864	6101	1808
3	2012	0.03	-0.16	-0.12	86133	6868	2317
4	2013	0.05	0.08	-0.17	81389	7351	2338
5	2014	0.04	0.13	-0.04	73861	8258	2322
6	2015	0.07	0.26	0.26	63368	10921	2369
7	2016	0.06	0.22	0.16	53603	14960	2336
8	2017	0.07	0.23	0.12	45811	17902	2607
9	2018	0.08	0.26	0.25	38934	20167	2555
10	2019	0.08	0.39	0.38	33537	20566	2445
11	2020	0.03	0.34	0.34	30260	22785	2828
12	2021	-0.02	0.23	0.30	26036	23109	2771
13	2022	-0.03	0.21	0.18	14150	23920	2573
14	2023	0.10	0.17	-0.02	10	21359	2269
15	2024	.	0.12	0.16	.	4805	667



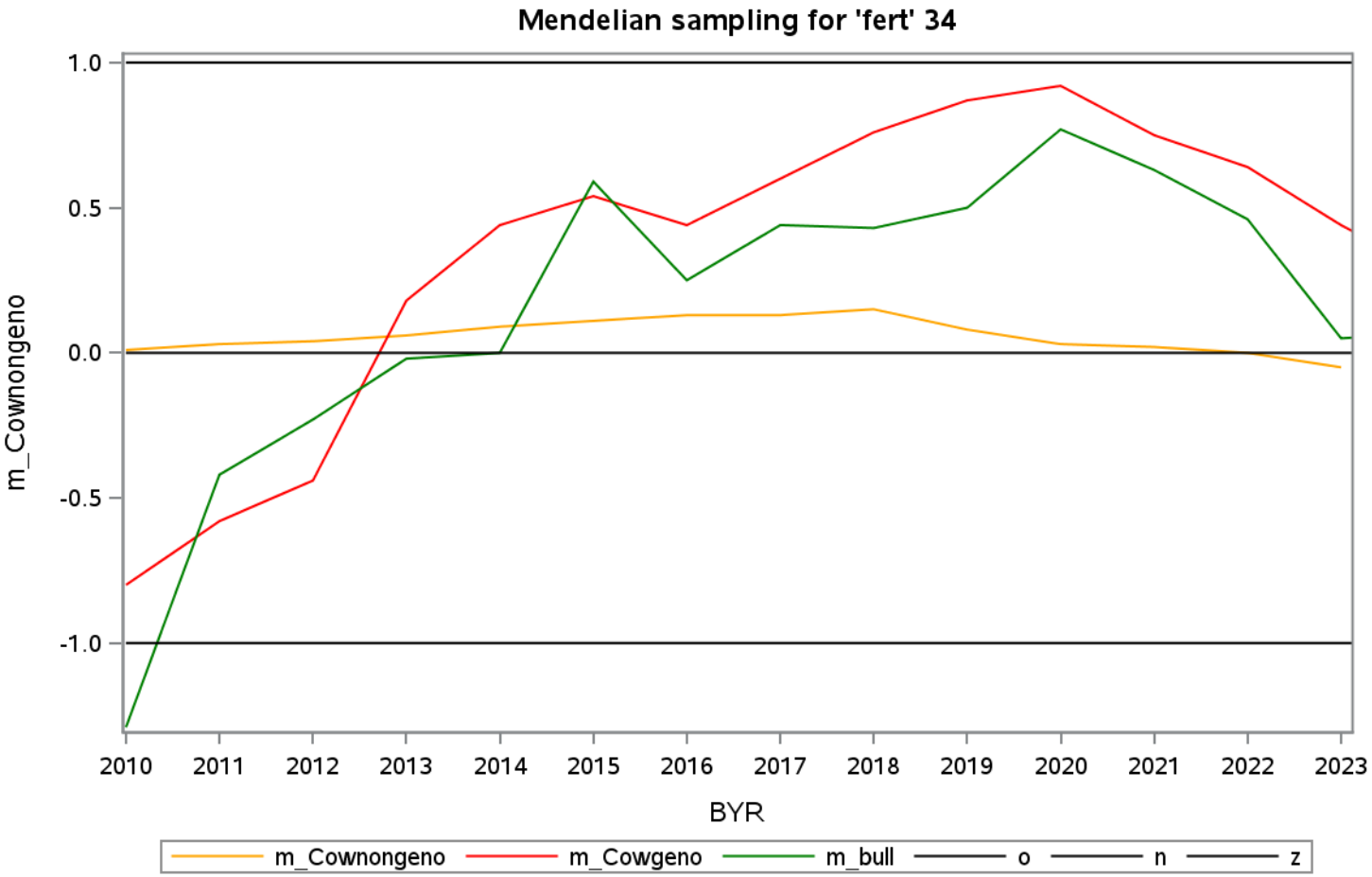
Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	0.03	-0.17	-0.26	100540	3545	987
2	2011	0.05	-0.10	-0.01	95864	6101	1808
3	2012	0.04	-0.18	-0.12	86133	6868	2317
4	2013	0.01	0.02	-0.24	81389	7351	2338
5	2014	-0.02	0.11	-0.08	73861	8258	2322
6	2015	0.03	0.18	0.16	63368	10921	2369
7	2016	0.04	0.16	0.16	53603	14960	2336
8	2017	0.04	0.18	0.10	45811	17902	2607
9	2018	0.02	0.19	0.19	38934	20167	2555
10	2019	0.03	0.29	0.37	33537	20566	2445
11	2020	0.00	0.30	0.34	30260	22785	2828
12	2021	0.03	0.23	0.28	26036	23109	2771
13	2022	-0.01	0.19	0.16	14150	23920	2573
14	2023	0.05	0.11	-0.03	10	21359	2269
15	2024	.	0.13	0.20	.	4805	667



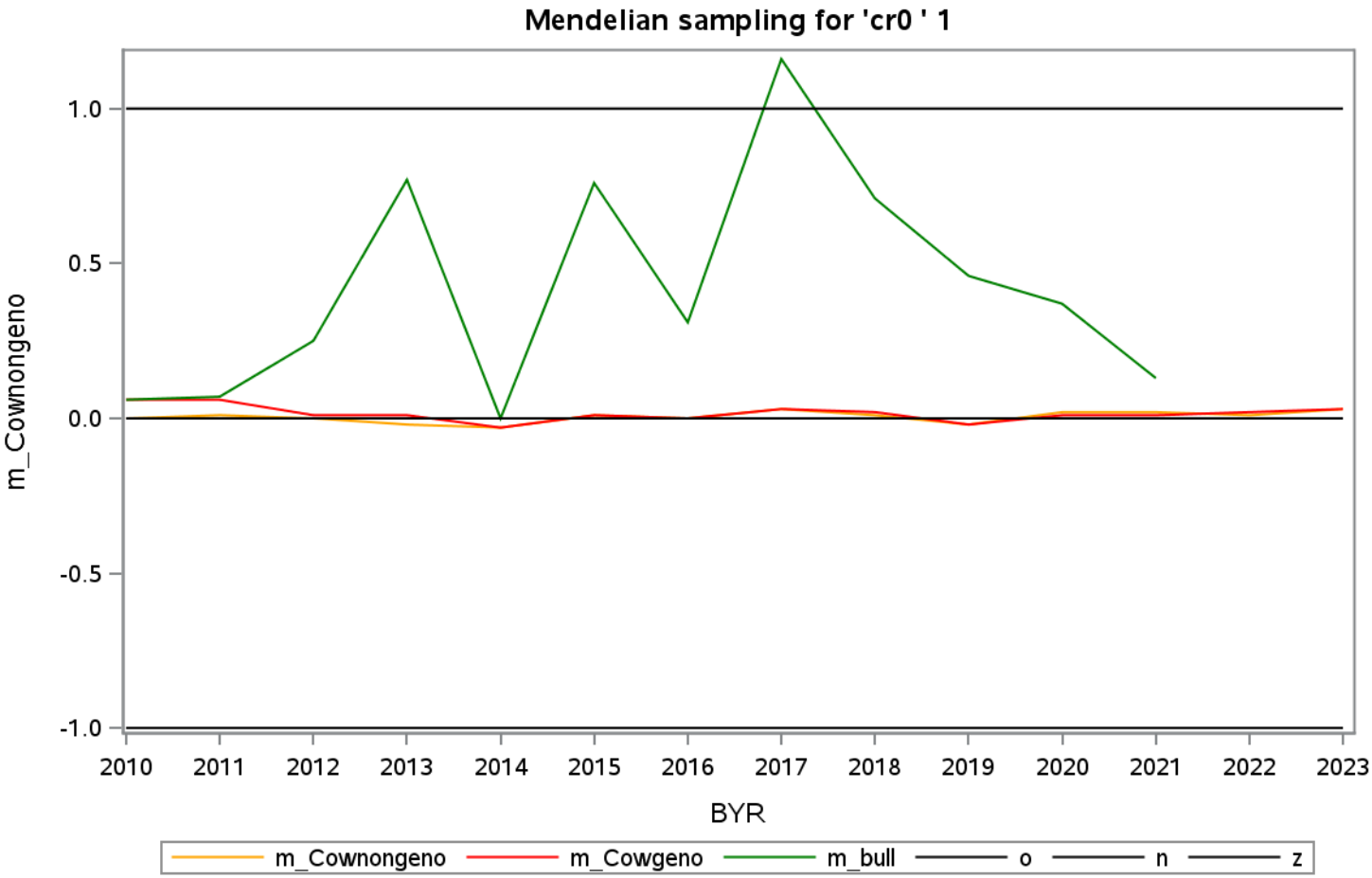
Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	0.07	-0.18	-0.40	100540	3545	987
2	2011	0.05	-0.14	-0.03	95864	6101	1808
3	2012	0.05	-0.16	-0.11	86133	6868	2317
4	2013	0.04	0.06	-0.13	81389	7351	2338
5	2014	0.01	0.13	-0.03	73861	8258	2322
6	2015	0.04	0.24	0.24	63368	10921	2369
7	2016	0.05	0.20	0.15	53603	14960	2336
8	2017	0.06	0.22	0.12	45811	17902	2607
9	2018	0.04	0.24	0.23	38934	20167	2555
10	2019	0.06	0.37	0.36	33537	20566	2445
11	2020	0.00	0.31	0.32	30260	22785	2828
12	2021	-0.02	0.21	0.30	26036	23109	2771
13	2022	0.00	0.24	0.19	14150	23920	2573
14	2023	0.00	0.14	-0.04	10	21359	2269
15	2024	.	0.18	0.18	.	4805	667



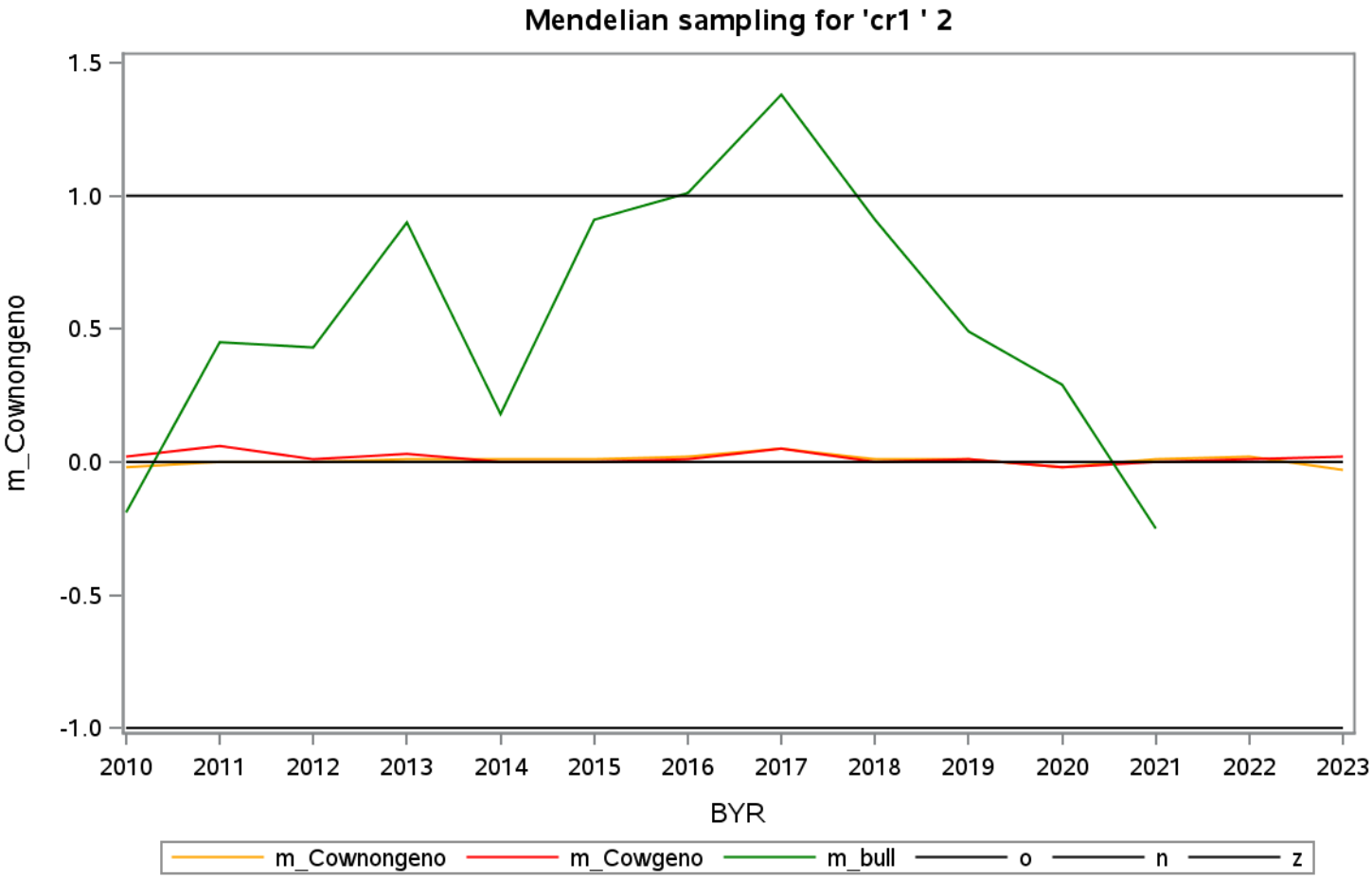
Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	0.01	-0.80	-1.29	100540	3545	987
2	2011	0.03	-0.58	-0.42	95864	6101	1808
3	2012	0.04	-0.44	-0.23	86133	6868	2317
4	2013	0.06	0.18	-0.02	81389	7351	2338
5	2014	0.09	0.44	0.00	73861	8258	2322
6	2015	0.11	0.54	0.59	63368	10921	2369
7	2016	0.13	0.44	0.25	53603	14960	2336
8	2017	0.13	0.60	0.44	45811	17902	2607
9	2018	0.15	0.76	0.43	38934	20167	2555
10	2019	0.08	0.87	0.50	33537	20566	2445
11	2020	0.03	0.92	0.77	30260	22785	2828
12	2021	0.02	0.75	0.63	26036	23109	2771
13	2022	0.00	0.64	0.46	14150	23920	2573
14	2023	-0.05	0.44	0.05	10	21359	2269
15	2024	.	0.27	0.07	.	4805	667



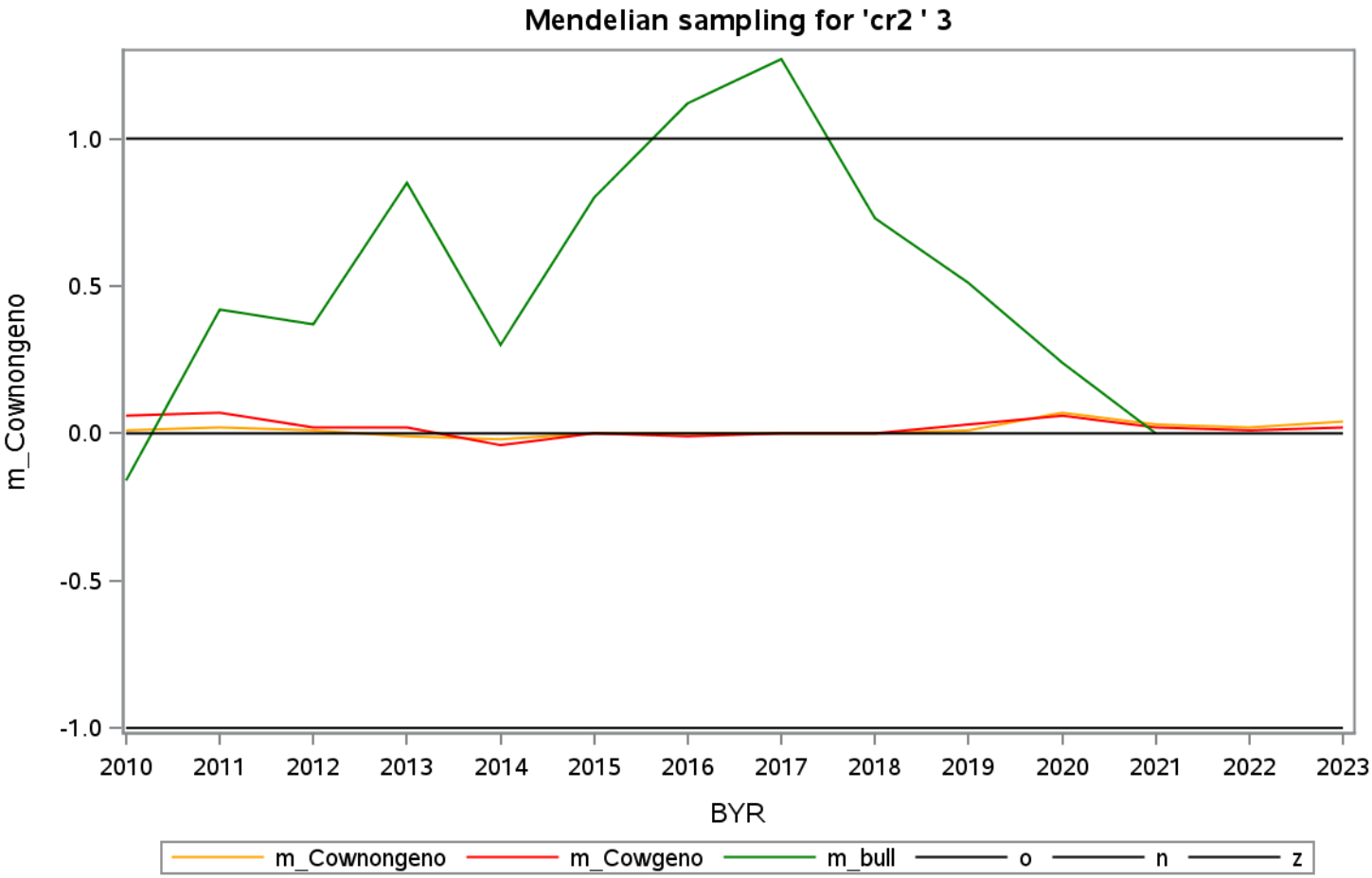
Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	0.00	0.06	0.06	101149	3459	224
2	2011	0.01	0.06	0.07	96371	5900	236
3	2012	0.00	0.01	0.25	86583	6460	242
4	2013	-0.02	0.01	0.77	81763	6793	204
5	2014	-0.03	-0.03	0.00	74150	7460	140
6	2015	0.01	0.01	0.76	63590	9570	119
7	2016	0.00	0.00	0.31	53779	13183	109
8	2017	0.03	0.03	1.16	45972	15387	100
9	2018	0.01	0.02	0.71	39049	17181	91
10	2019	-0.02	-0.02	0.46	33610	17479	71
11	2020	0.02	0.01	0.37	30342	19931	62
12	2021	0.02	0.01	0.13	26282	20074	4
13	2022	0.01	0.02	.	16042	16028	.
14	2023	0.03	0.03	.	256	286	.



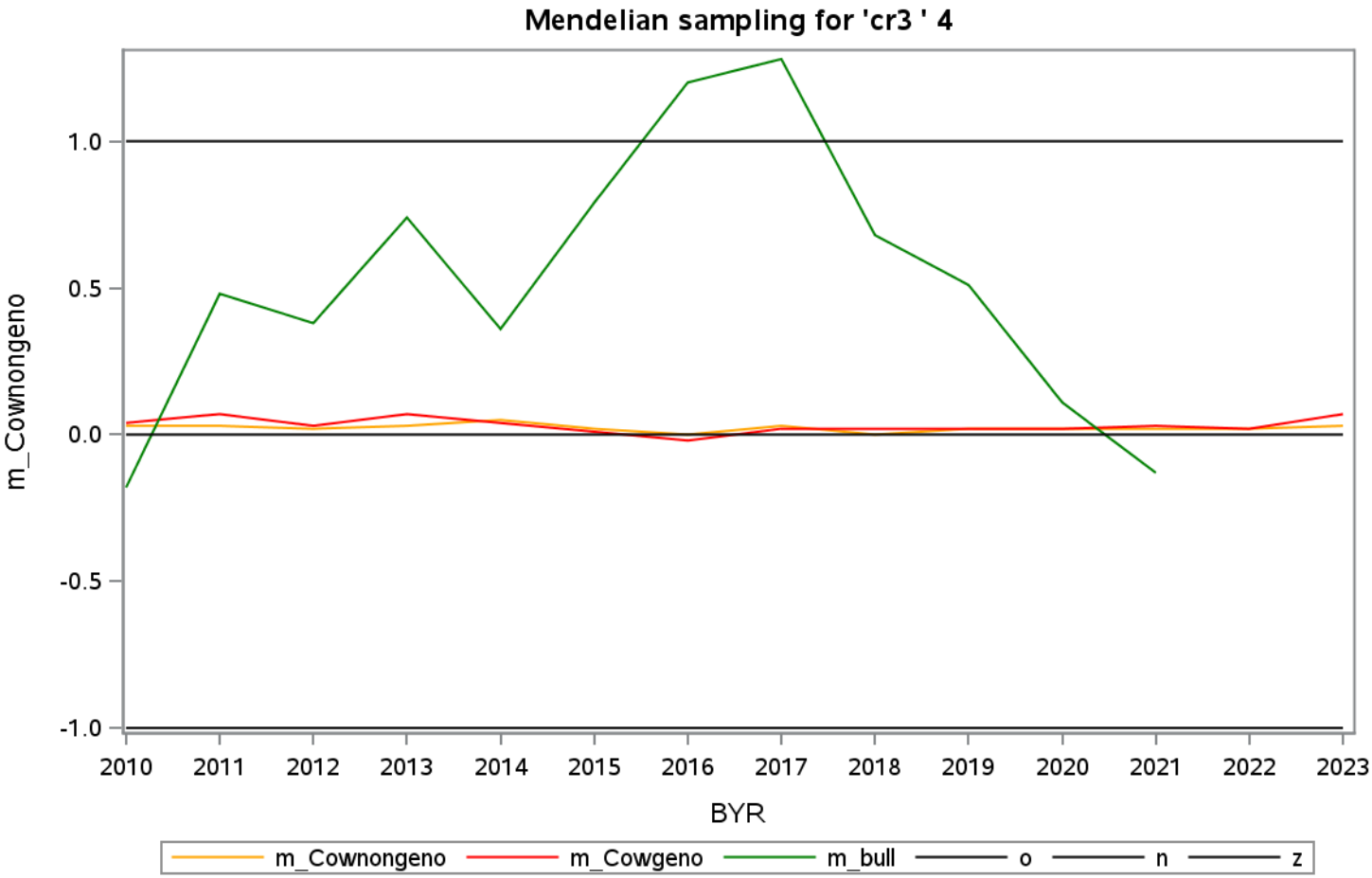
Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	-0.02	0.02	-0.19	101149	3459	224
2	2011	0.00	0.06	0.45	96371	5900	236
3	2012	0.00	0.01	0.43	86583	6460	242
4	2013	0.01	0.03	0.90	81763	6793	204
5	2014	0.01	0.00	0.18	74150	7460	140
6	2015	0.01	0.00	0.91	63590	9570	119
7	2016	0.02	0.01	1.01	53779	13183	109
8	2017	0.05	0.05	1.38	45972	15387	100
9	2018	0.01	0.00	0.91	39049	17181	91
10	2019	0.01	0.01	0.49	33610	17479	71
11	2020	-0.02	-0.02	0.29	30342	19931	62
12	2021	0.01	0.00	-0.25	26282	20074	4
13	2022	0.02	0.01	.	16042	16028	.
14	2023	-0.03	0.02	.	256	286	.



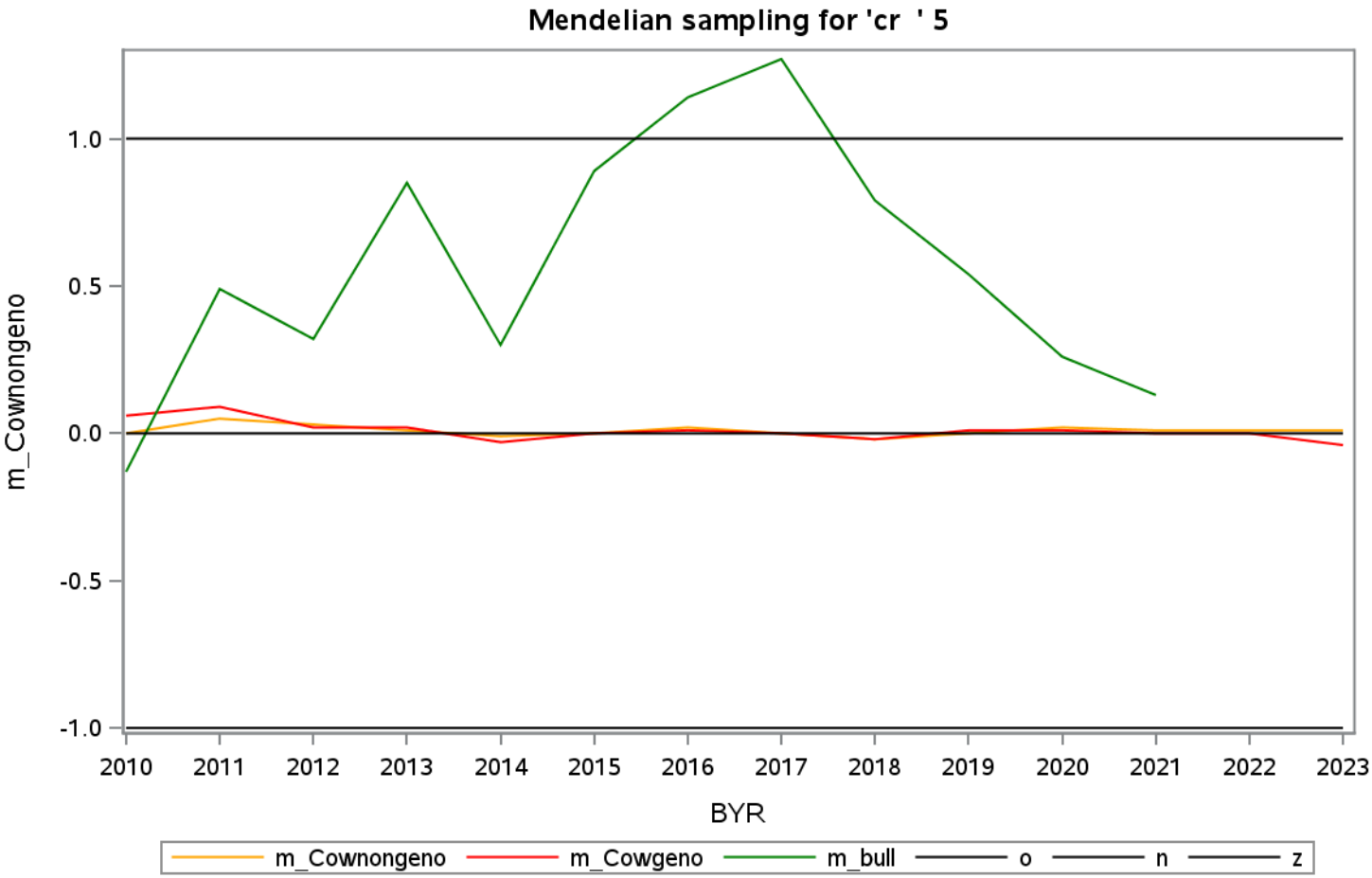
Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	0.01	0.06	-0.16	101149	3459	224
2	2011	0.02	0.07	0.42	96371	5900	236
3	2012	0.01	0.02	0.37	86583	6460	242
4	2013	-0.01	0.02	0.85	81763	6793	204
5	2014	-0.02	-0.04	0.30	74150	7460	140
6	2015	0.00	0.00	0.80	63590	9570	119
7	2016	0.00	-0.01	1.12	53779	13183	109
8	2017	0.00	0.00	1.27	45972	15387	100
9	2018	0.00	0.00	0.73	39049	17181	91
10	2019	0.01	0.03	0.51	33610	17479	71
11	2020	0.07	0.06	0.24	30342	19931	62
12	2021	0.03	0.02	0.00	26282	20074	4
13	2022	0.02	0.01	.	16042	16028	.
14	2023	0.04	0.02	.	256	286	.



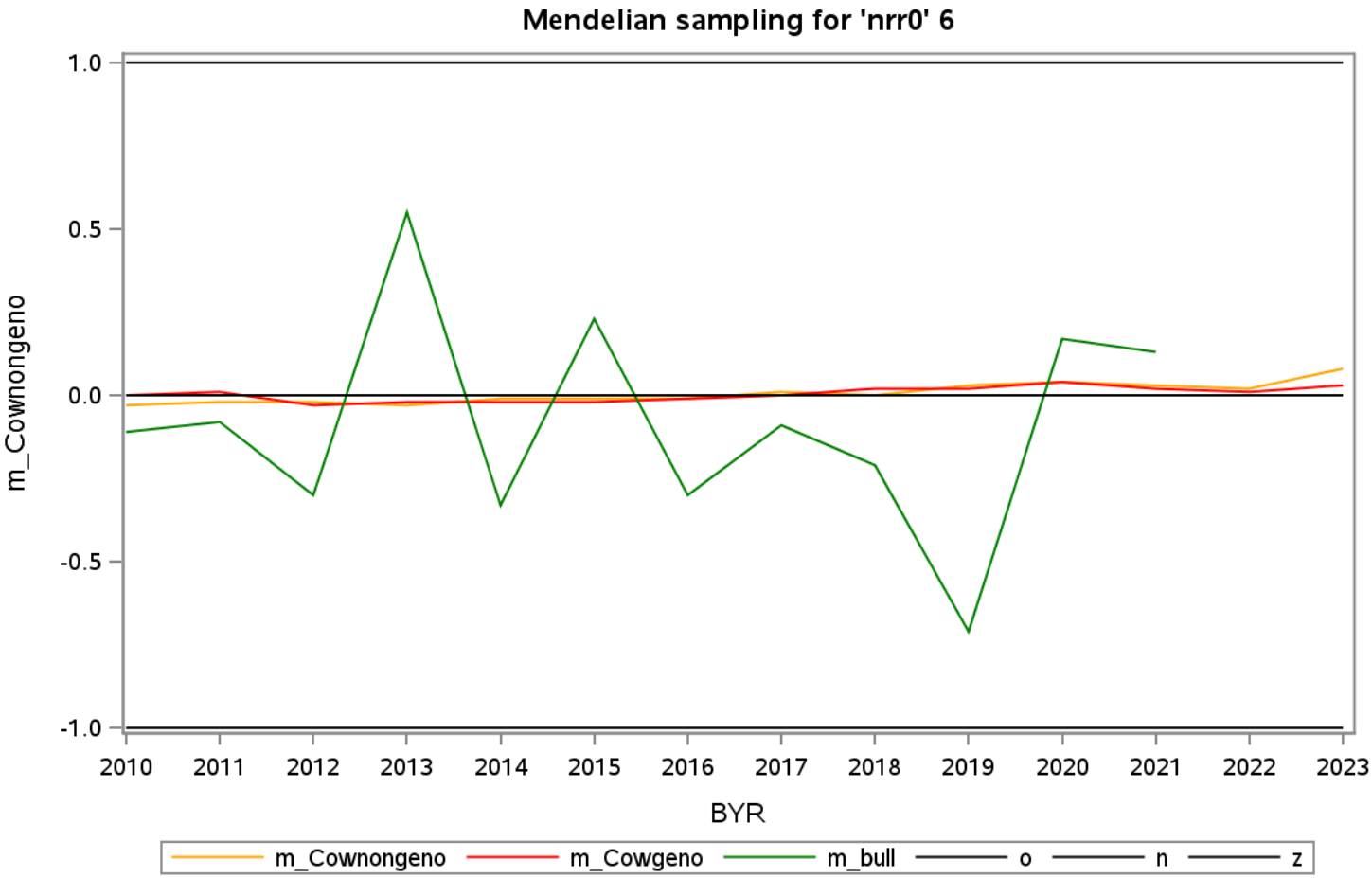
Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	0.03	0.04	-0.18	101149	3459	224
2	2011	0.03	0.07	0.48	96371	5900	236
3	2012	0.02	0.03	0.38	86583	6460	242
4	2013	0.03	0.07	0.74	81763	6793	204
5	2014	0.05	0.04	0.36	74150	7460	140
6	2015	0.02	0.01	0.79	63590	9570	119
7	2016	0.00	-0.02	1.20	53779	13183	109
8	2017	0.03	0.02	1.28	45972	15387	100
9	2018	0.00	0.02	0.68	39049	17181	91
10	2019	0.02	0.02	0.51	33610	17479	71
11	2020	0.02	0.02	0.11	30342	19931	62
12	2021	0.02	0.03	-0.13	26282	20074	4
13	2022	0.02	0.02	.	16042	16028	.
14	2023	0.03	0.07	.	256	286	.



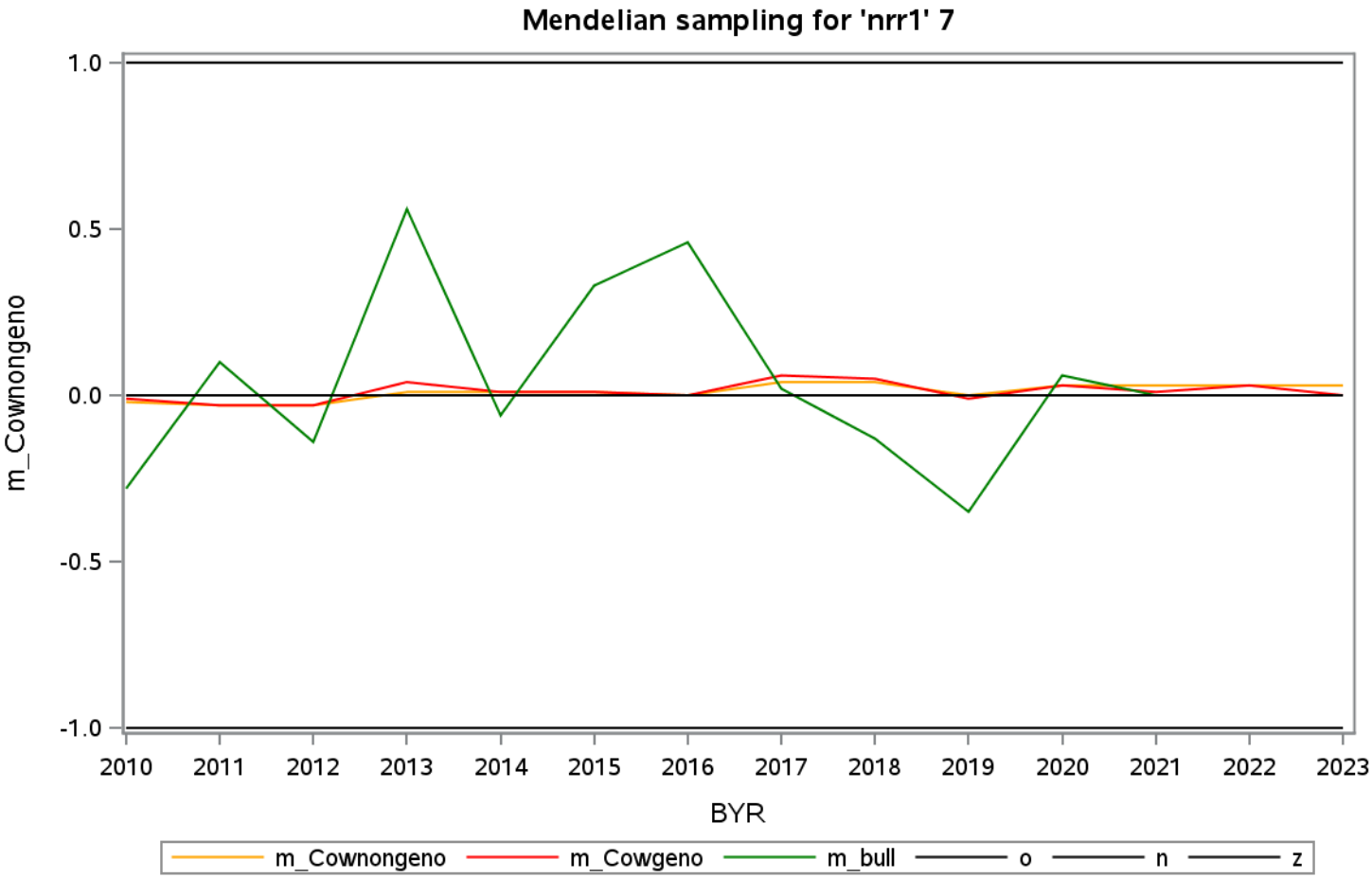
Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	0.00	0.06	-0.13	101149	3459	224
2	2011	0.05	0.09	0.49	96371	5900	236
3	2012	0.03	0.02	0.32	86583	6460	242
4	2013	0.01	0.02	0.85	81763	6793	204
5	2014	-0.01	-0.03	0.30	74150	7460	140
6	2015	0.00	0.00	0.89	63590	9570	119
7	2016	0.02	0.01	1.14	53779	13183	109
8	2017	0.00	0.00	1.27	45972	15387	100
9	2018	-0.02	-0.02	0.79	39049	17181	91
10	2019	0.00	0.01	0.54	33610	17479	71
11	2020	0.02	0.01	0.26	30342	19931	62
12	2021	0.01	0.00	0.13	26282	20074	4
13	2022	0.01	0.00	.	16042	16028	.
14	2023	0.01	-0.04	.	256	286	.



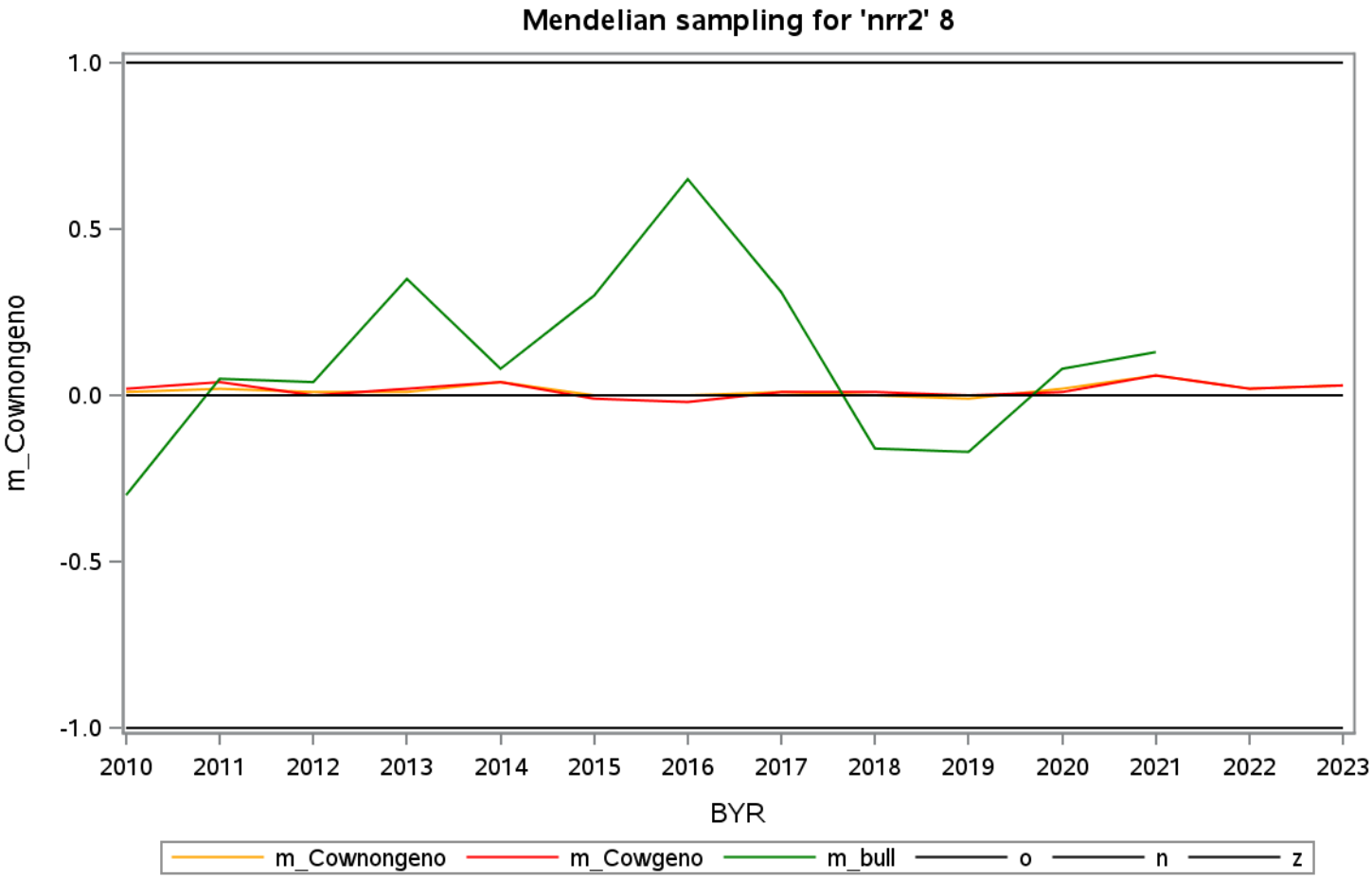
Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	-0.03	0.00	-0.11	101149	3459	224
2	2011	-0.02	0.01	-0.08	96371	5900	236
3	2012	-0.02	-0.03	-0.30	86583	6460	242
4	2013	-0.03	-0.02	0.55	81763	6793	204
5	2014	-0.01	-0.02	-0.33	74150	7460	140
6	2015	-0.01	-0.02	0.23	63590	9570	119
7	2016	-0.01	-0.01	-0.30	53779	13183	109
8	2017	0.01	0.00	-0.09	45972	15387	100
9	2018	0.00	0.02	-0.21	39049	17181	91
10	2019	0.03	0.02	-0.71	33610	17479	71
11	2020	0.04	0.04	0.17	30342	19931	62
12	2021	0.03	0.02	0.13	26282	20074	4
13	2022	0.02	0.01	.	16042	16028	.
14	2023	0.08	0.03	.	256	286	.



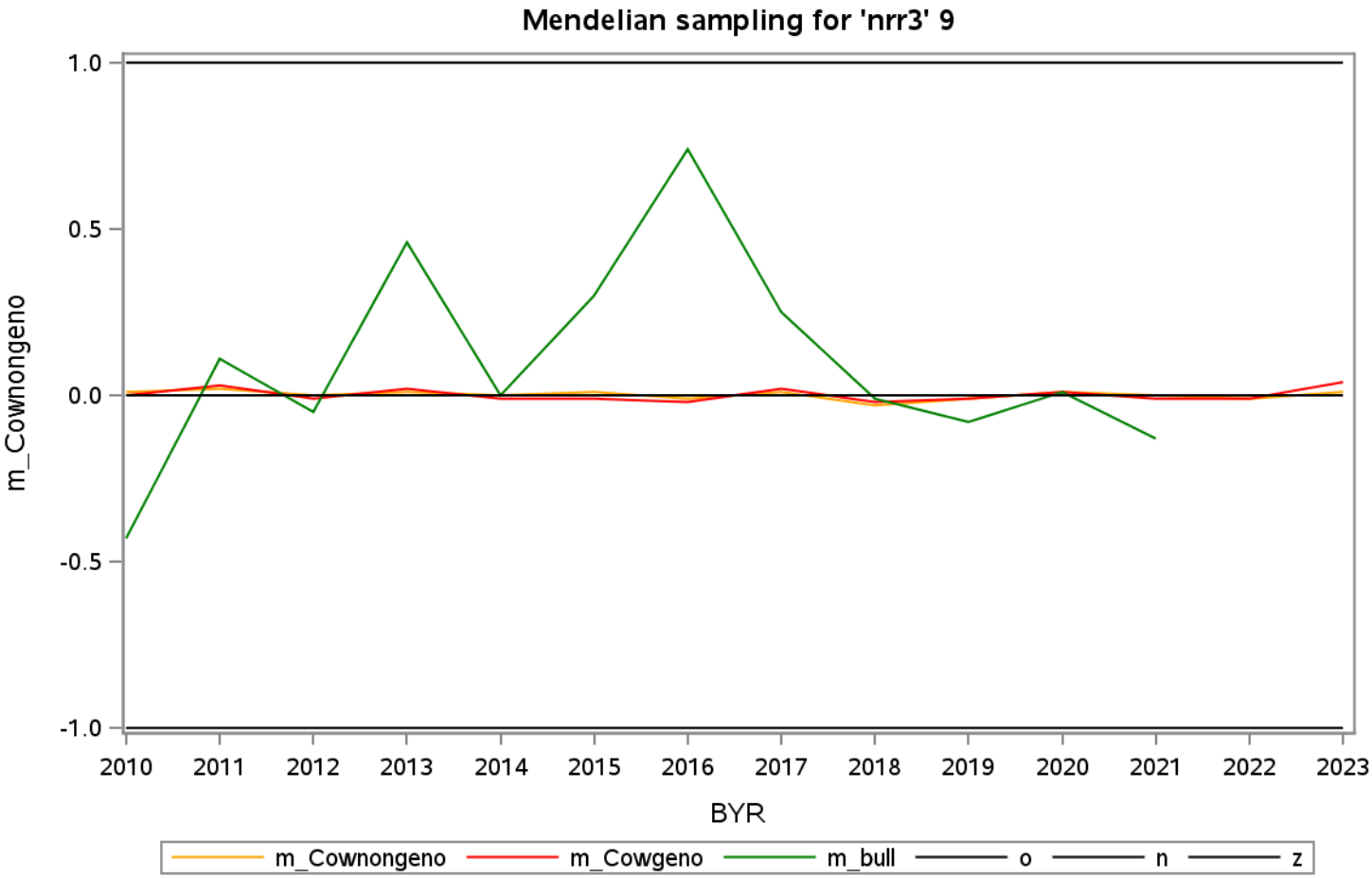
Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	-0.02	-0.01	-0.28	101149	3459	224
2	2011	-0.03	-0.03	0.10	96371	5900	236
3	2012	-0.03	-0.03	-0.14	86583	6460	242
4	2013	0.01	0.04	0.56	81763	6793	204
5	2014	0.01	0.01	-0.06	74150	7460	140
6	2015	0.01	0.01	0.33	63590	9570	119
7	2016	0.00	0.00	0.46	53779	13183	109
8	2017	0.04	0.06	0.02	45972	15387	100
9	2018	0.04	0.05	-0.13	39049	17181	91
10	2019	0.00	-0.01	-0.35	33610	17479	71
11	2020	0.03	0.03	0.06	30342	19931	62
12	2021	0.03	0.01	0.00	26282	20074	4
13	2022	0.03	0.03	.	16042	16028	.
14	2023	0.03	0.00	.	256	286	.



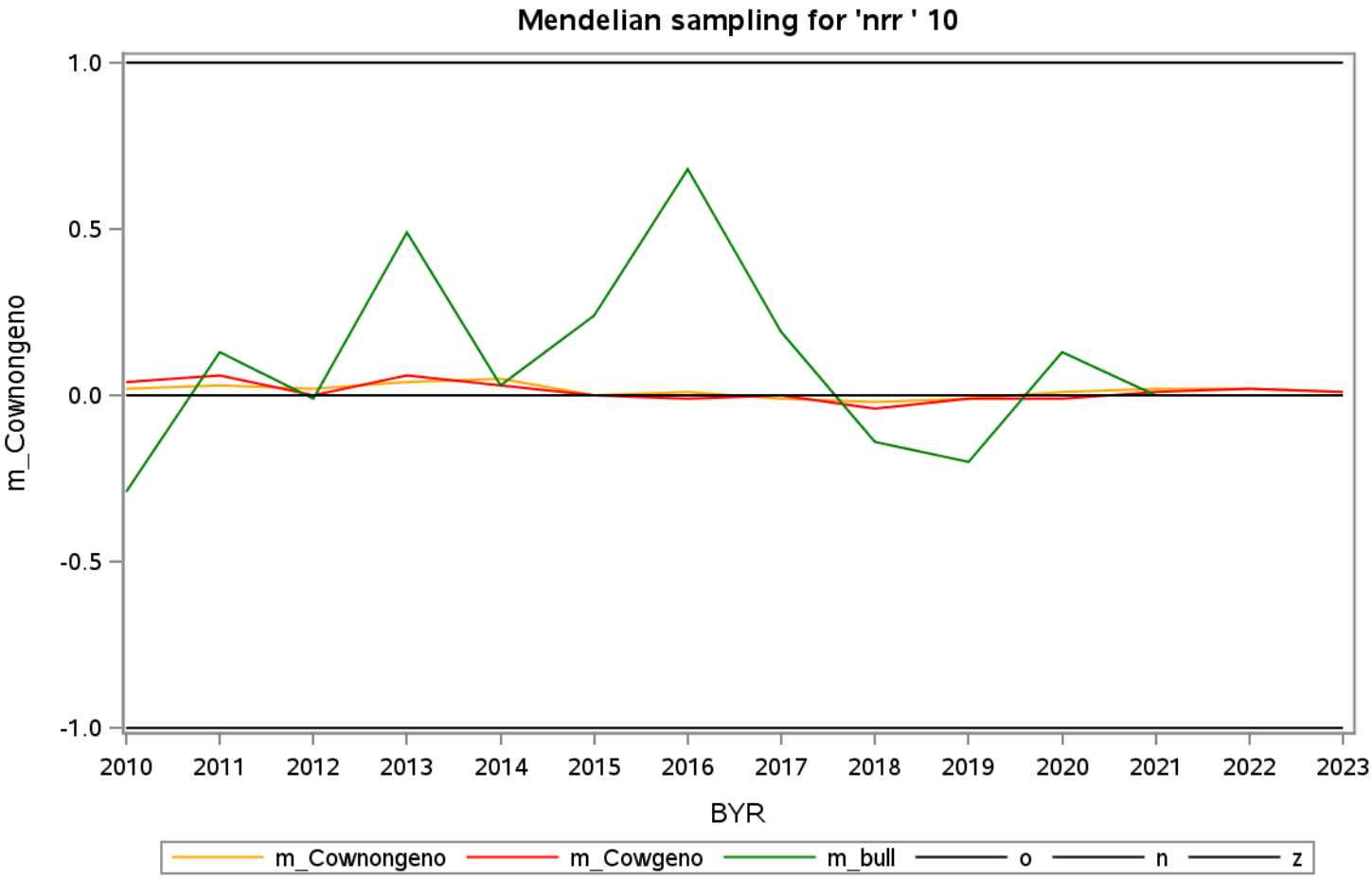
Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	0.01	0.02	-0.30	101149	3459	224
2	2011	0.02	0.04	0.05	96371	5900	236
3	2012	0.01	0.00	0.04	86583	6460	242
4	2013	0.01	0.02	0.35	81763	6793	204
5	2014	0.04	0.04	0.08	74150	7460	140
6	2015	0.00	-0.01	0.30	63590	9570	119
7	2016	0.00	-0.02	0.65	53779	13183	109
8	2017	0.01	0.01	0.31	45972	15387	100
9	2018	0.00	0.01	-0.16	39049	17181	91
10	2019	-0.01	0.00	-0.17	33610	17479	71
11	2020	0.02	0.01	0.08	30342	19931	62
12	2021	0.06	0.06	0.13	26282	20074	4
13	2022	0.02	0.02	.	16042	16028	.
14	2023	0.03	0.03	.	256	286	.



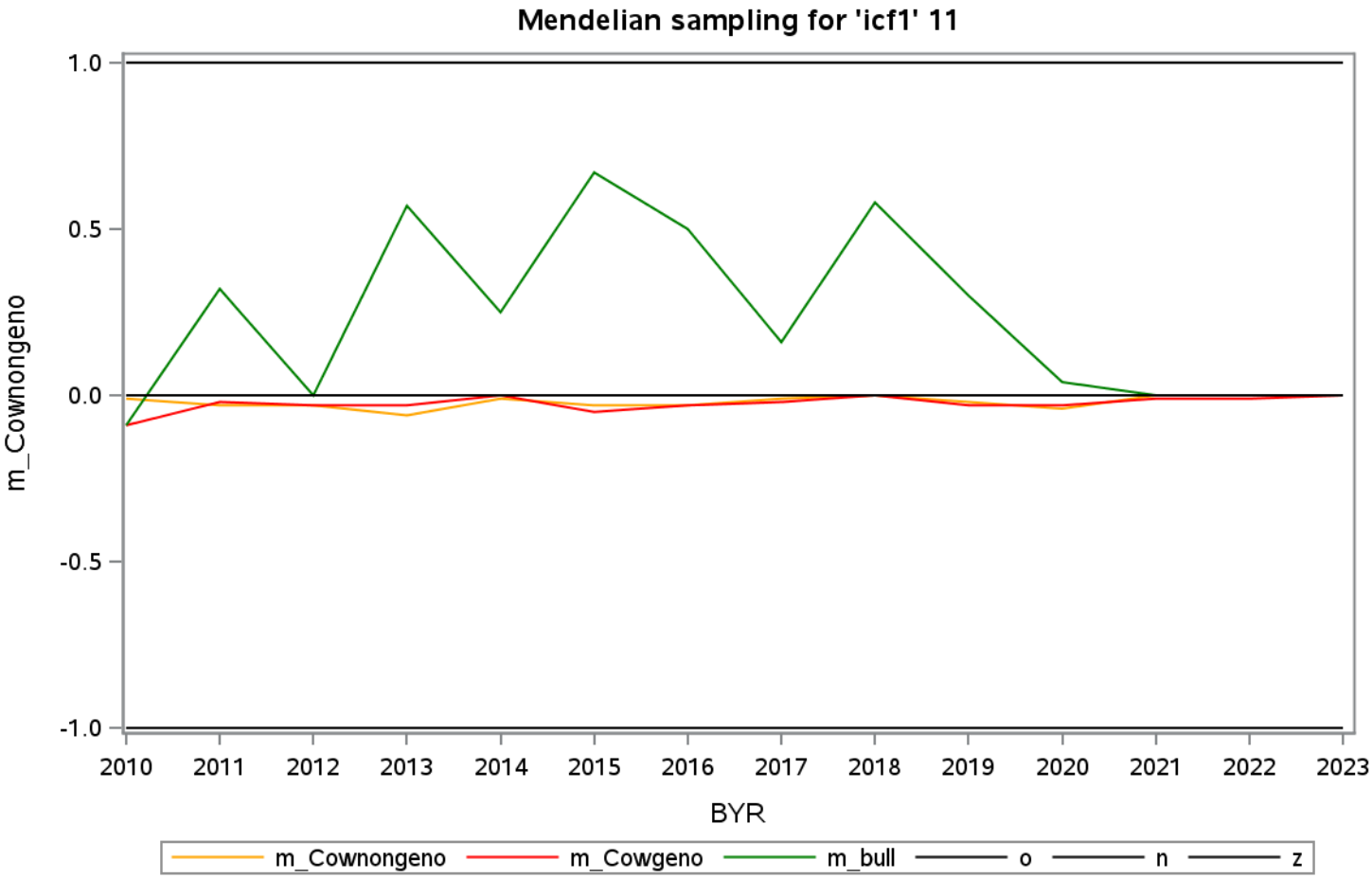
Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	0.01	0.00	-0.43	101149	3459	224
2	2011	0.02	0.03	0.11	96371	5900	236
3	2012	0.00	-0.01	-0.05	86583	6460	242
4	2013	0.01	0.02	0.46	81763	6793	204
5	2014	0.00	-0.01	0.00	74150	7460	140
6	2015	0.01	-0.01	0.30	63590	9570	119
7	2016	-0.01	-0.02	0.74	53779	13183	109
8	2017	0.01	0.02	0.25	45972	15387	100
9	2018	-0.03	-0.02	-0.01	39049	17181	91
10	2019	-0.01	-0.01	-0.08	33610	17479	71
11	2020	0.01	0.01	0.01	30342	19931	62
12	2021	0.00	-0.01	-0.13	26282	20074	4
13	2022	-0.01	-0.01	.	16042	16028	.
14	2023	0.01	0.04	.	256	286	.



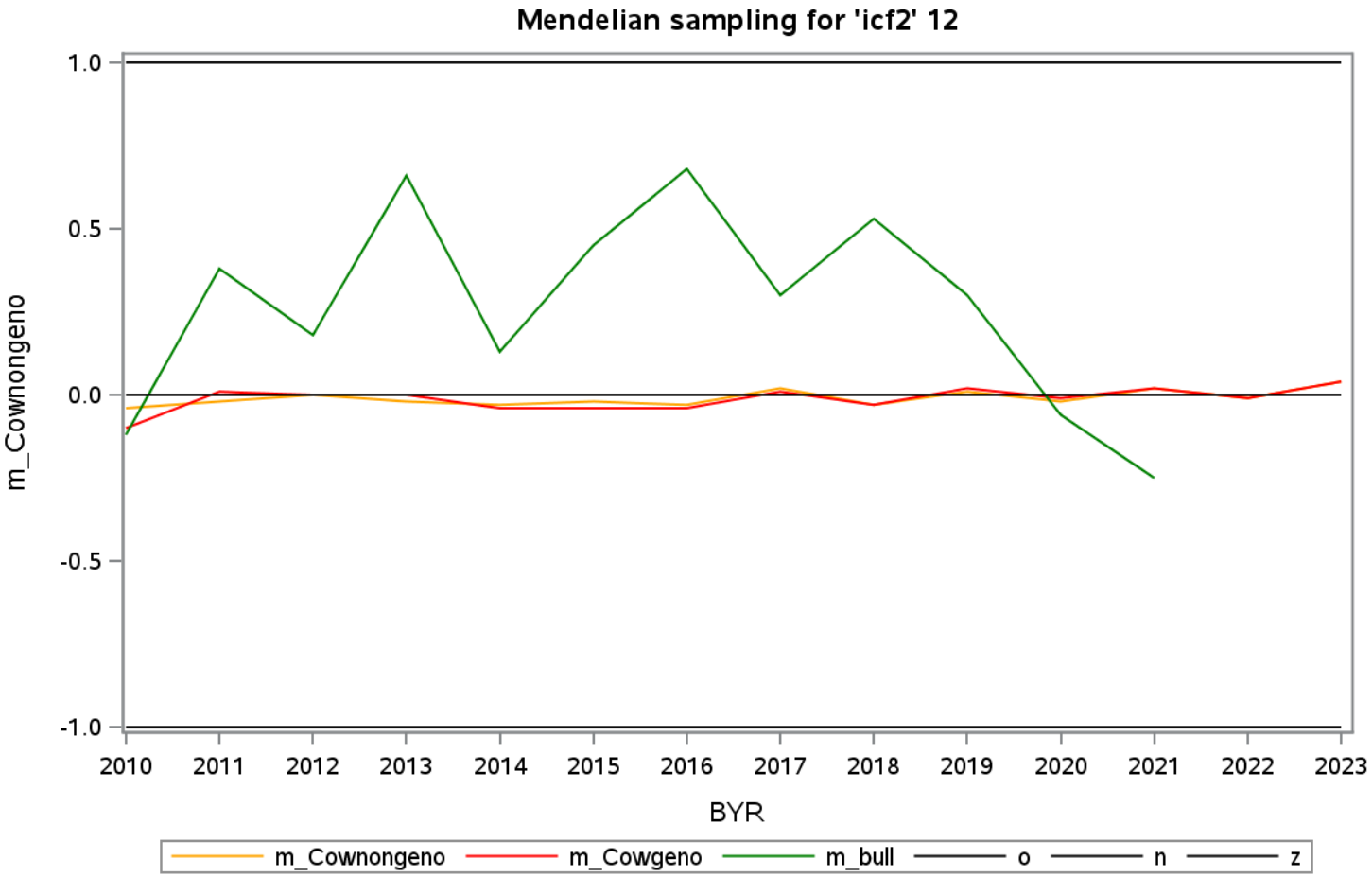
Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	0.02	0.04	-0.29	101149	3459	224
2	2011	0.03	0.06	0.13	96371	5900	236
3	2012	0.02	0.00	-0.01	86583	6460	242
4	2013	0.04	0.06	0.49	81763	6793	204
5	2014	0.05	0.03	0.03	74150	7460	140
6	2015	0.00	0.00	0.24	63590	9570	119
7	2016	0.01	-0.01	0.68	53779	13183	109
8	2017	-0.01	0.00	0.19	45972	15387	100
9	2018	-0.02	-0.04	-0.14	39049	17181	91
10	2019	-0.01	-0.01	-0.20	33610	17479	71
11	2020	0.01	-0.01	0.13	30342	19931	62
12	2021	0.02	0.01	0.00	26282	20074	4
13	2022	0.02	0.02	.	16042	16028	.
14	2023	0.01	0.01	.	256	286	.



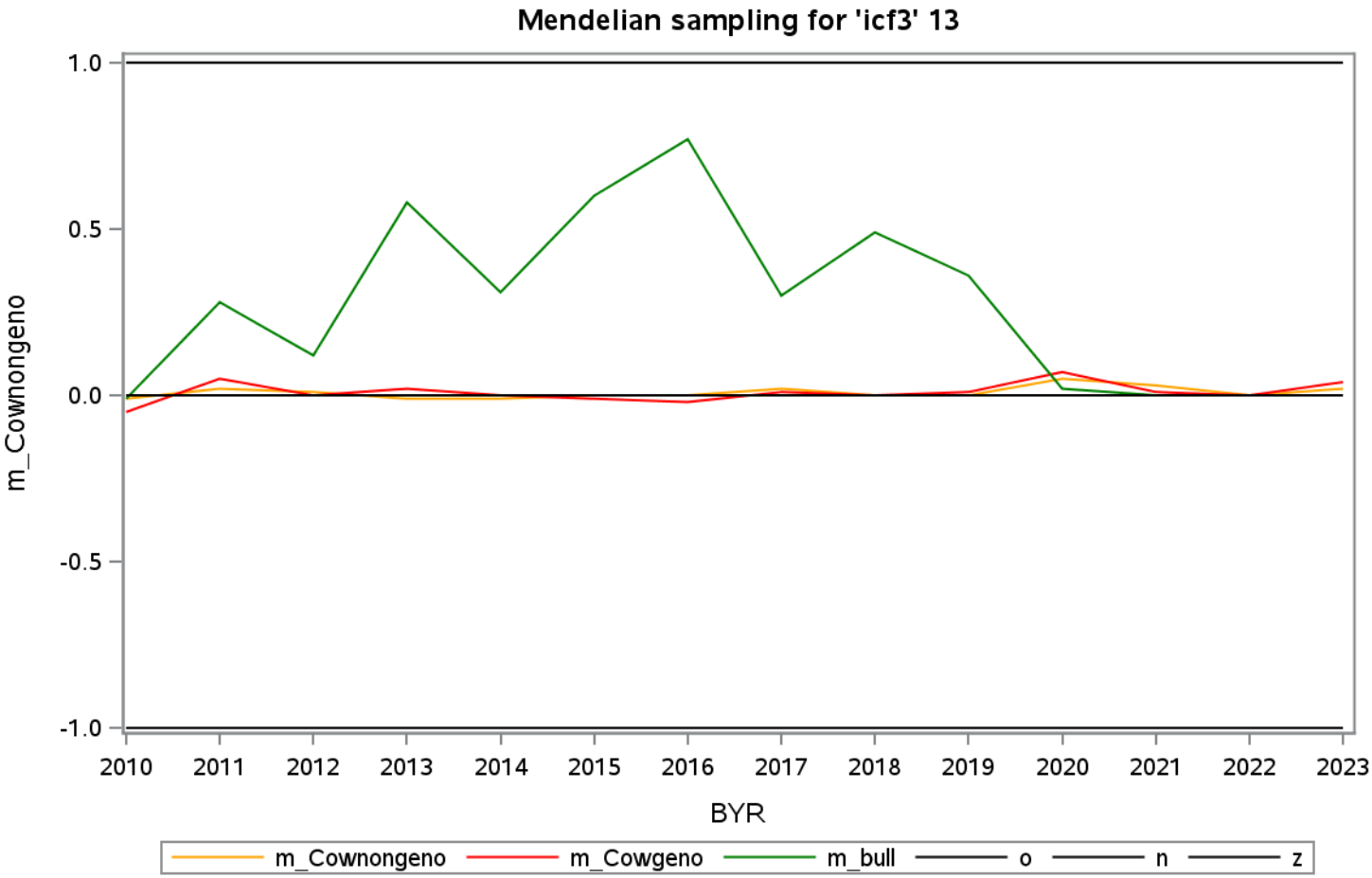
Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	-0.01	-0.09	-0.09	101149	3459	224
2	2011	-0.03	-0.02	0.32	96371	5900	236
3	2012	-0.03	-0.03	0.00	86583	6460	242
4	2013	-0.06	-0.03	0.57	81763	6793	204
5	2014	-0.01	0.00	0.25	74150	7460	140
6	2015	-0.03	-0.05	0.67	63590	9570	119
7	2016	-0.03	-0.03	0.50	53779	13183	109
8	2017	-0.01	-0.02	0.16	45972	15387	100
9	2018	0.00	0.00	0.58	39049	17181	91
10	2019	-0.02	-0.03	0.30	33610	17479	71
11	2020	-0.04	-0.03	0.04	30342	19931	62
12	2021	0.00	-0.01	0.00	26282	20074	4
13	2022	0.00	-0.01	.	16042	16028	.
14	2023	0.00	0.00	.	256	286	.



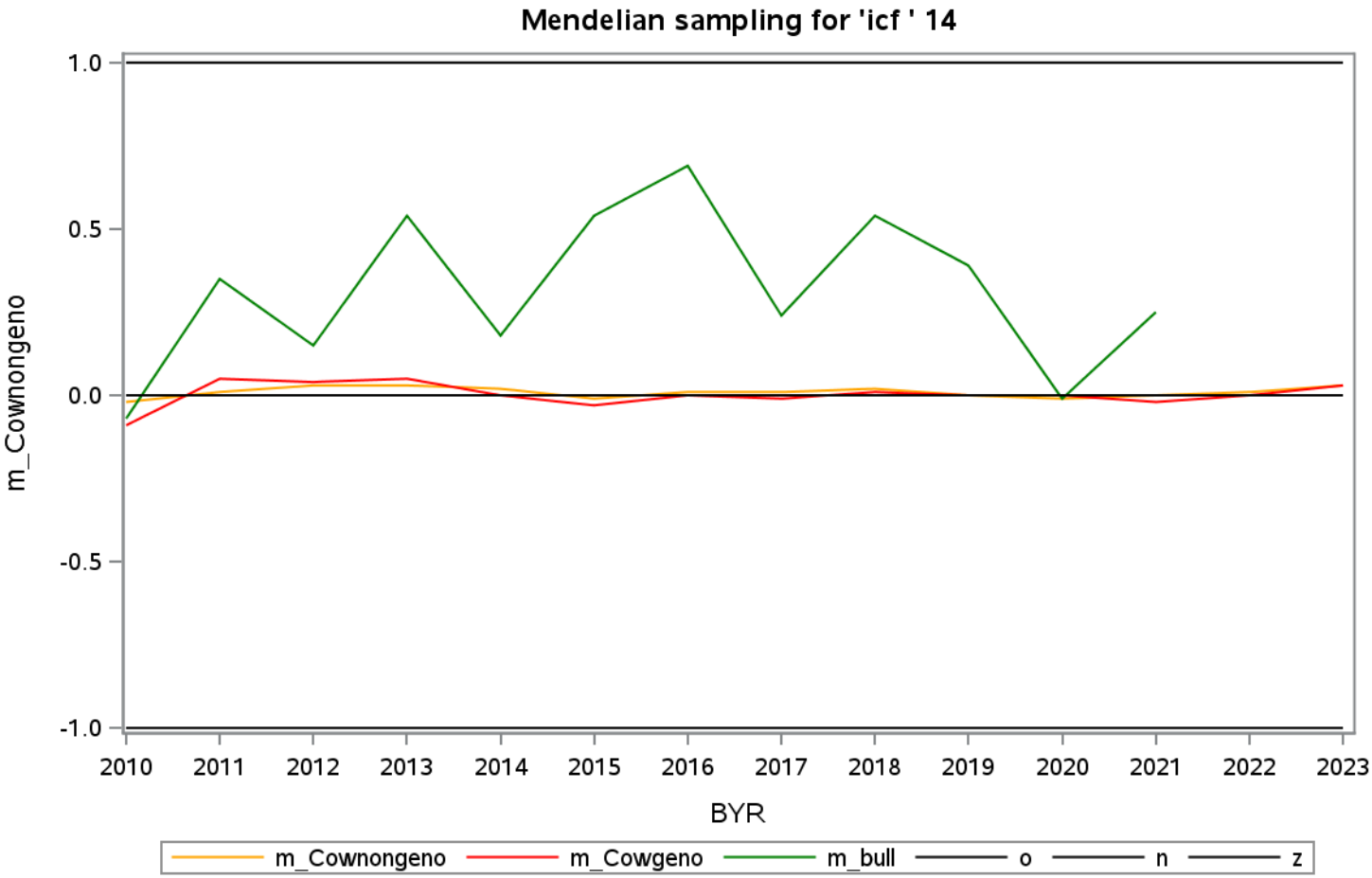
Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	-0.04	-0.10	-0.12	101149	3459	224
2	2011	-0.02	0.01	0.38	96371	5900	236
3	2012	0.00	0.00	0.18	86583	6460	242
4	2013	-0.02	0.00	0.66	81763	6793	204
5	2014	-0.03	-0.04	0.13	74150	7460	140
6	2015	-0.02	-0.04	0.45	63590	9570	119
7	2016	-0.03	-0.04	0.68	53779	13183	109
8	2017	0.02	0.01	0.30	45972	15387	100
9	2018	-0.03	-0.03	0.53	39049	17181	91
10	2019	0.01	0.02	0.30	33610	17479	71
11	2020	-0.02	-0.01	-0.06	30342	19931	62
12	2021	0.02	0.02	-0.25	26282	20074	4
13	2022	-0.01	-0.01	.	16042	16028	.
14	2023	0.04	0.04	.	256	286	.



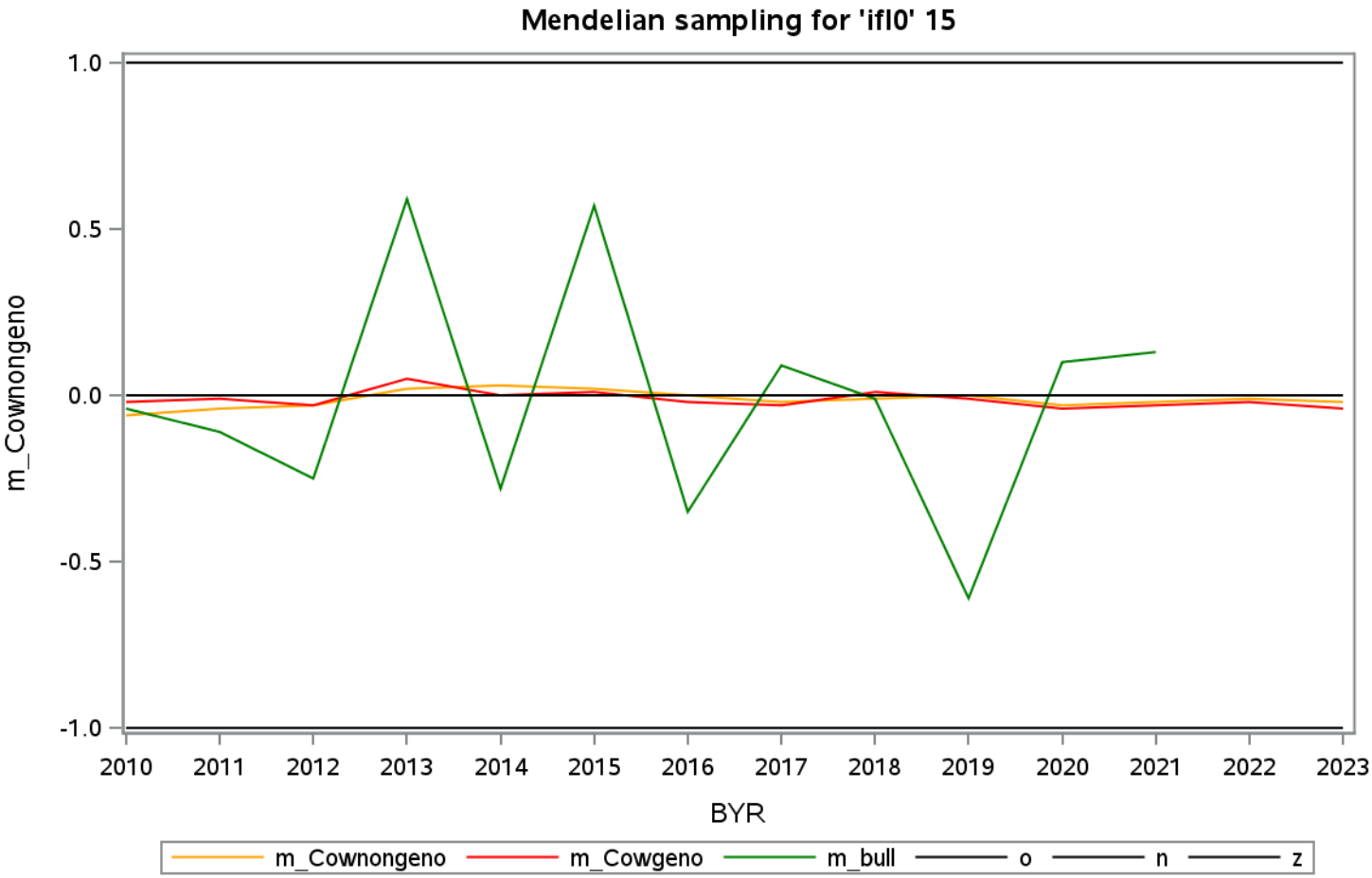
Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	-0.01	-0.05	-0.01	101149	3459	224
2	2011	0.02	0.05	0.28	96371	5900	236
3	2012	0.01	0.00	0.12	86583	6460	242
4	2013	-0.01	0.02	0.58	81763	6793	204
5	2014	-0.01	0.00	0.31	74150	7460	140
6	2015	0.00	-0.01	0.60	63590	9570	119
7	2016	0.00	-0.02	0.77	53779	13183	109
8	2017	0.02	0.01	0.30	45972	15387	100
9	2018	0.00	0.00	0.49	39049	17181	91
10	2019	0.00	0.01	0.36	33610	17479	71
11	2020	0.05	0.07	0.02	30342	19931	62
12	2021	0.03	0.01	0.00	26282	20074	4
13	2022	0.00	0.00	.	16042	16028	.
14	2023	0.02	0.04	.	256	286	.



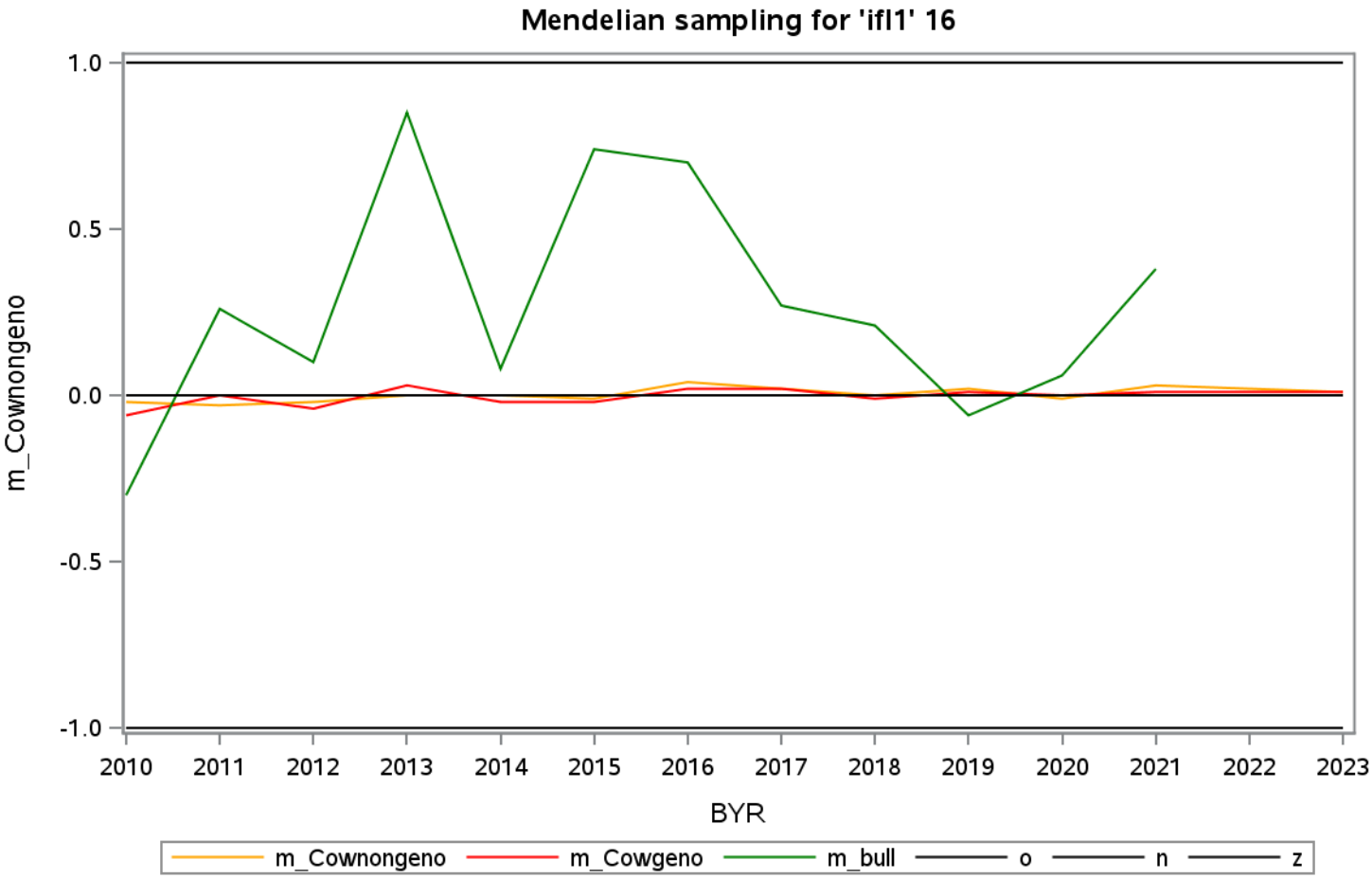
Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	-0.02	-0.09	-0.07	101149	3459	224
2	2011	0.01	0.05	0.35	96371	5900	236
3	2012	0.03	0.04	0.15	86583	6460	242
4	2013	0.03	0.05	0.54	81763	6793	204
5	2014	0.02	0.00	0.18	74150	7460	140
6	2015	-0.01	-0.03	0.54	63590	9570	119
7	2016	0.01	0.00	0.69	53779	13183	109
8	2017	0.01	-0.01	0.24	45972	15387	100
9	2018	0.02	0.01	0.54	39049	17181	91
10	2019	0.00	0.00	0.39	33610	17479	71
11	2020	-0.01	0.00	-0.01	30342	19931	62
12	2021	0.00	-0.02	0.25	26282	20074	4
13	2022	0.01	0.00	.	16042	16028	.
14	2023	0.03	0.03	.	256	286	.



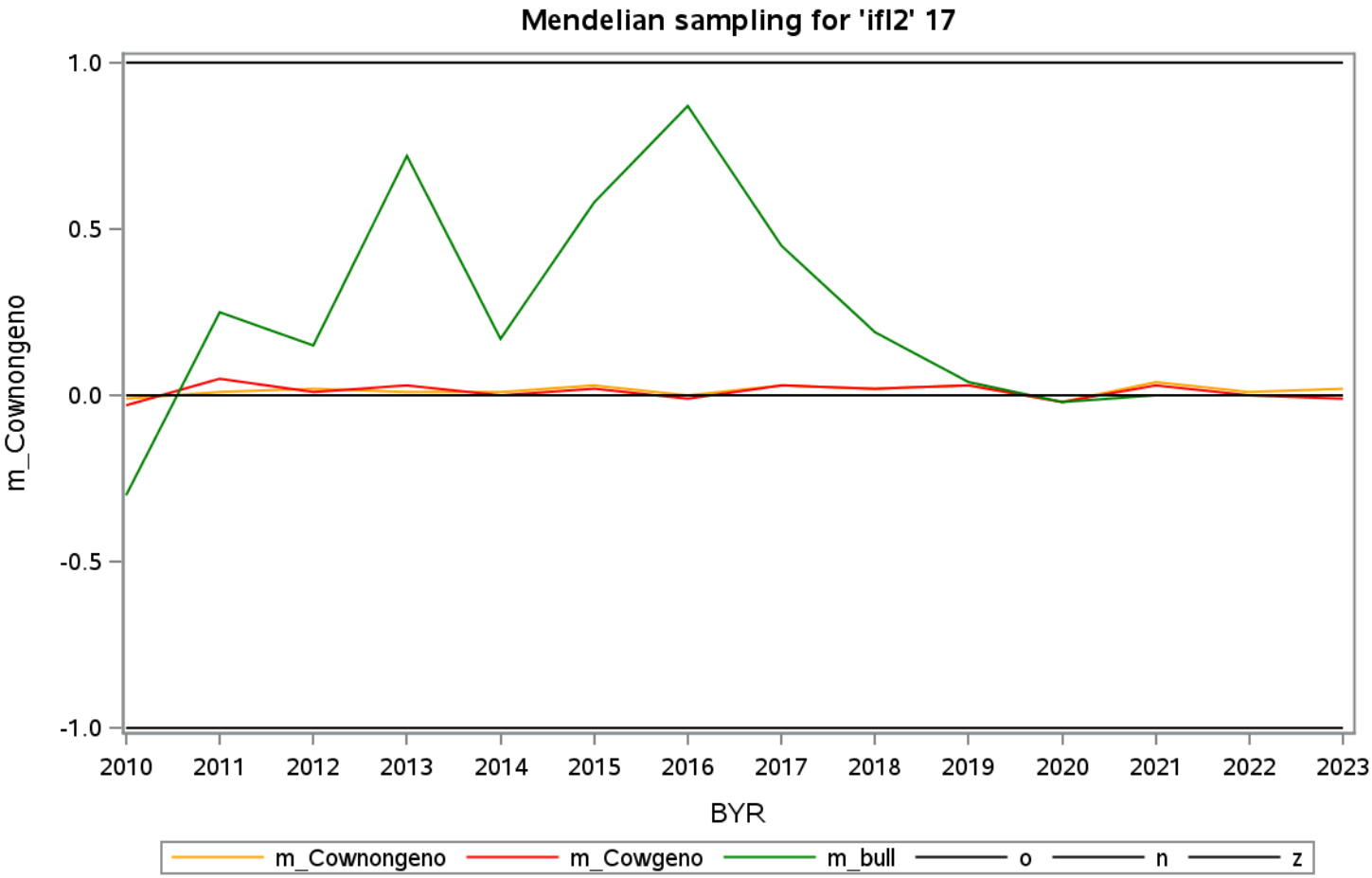
Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	-0.06	-0.02	-0.04	101149	3459	224
2	2011	-0.04	-0.01	-0.11	96371	5900	236
3	2012	-0.03	-0.03	-0.25	86583	6460	242
4	2013	0.02	0.05	0.59	81763	6793	204
5	2014	0.03	0.00	-0.28	74150	7460	140
6	2015	0.02	0.01	0.57	63590	9570	119
7	2016	0.00	-0.02	-0.35	53779	13183	109
8	2017	-0.02	-0.03	0.09	45972	15387	100
9	2018	-0.01	0.01	-0.01	39049	17181	91
10	2019	0.00	-0.01	-0.61	33610	17479	71
11	2020	-0.03	-0.04	0.10	30342	19931	62
12	2021	-0.02	-0.03	0.13	26282	20074	4
13	2022	-0.01	-0.02	.	16042	16028	.
14	2023	-0.02	-0.04	.	256	286	.



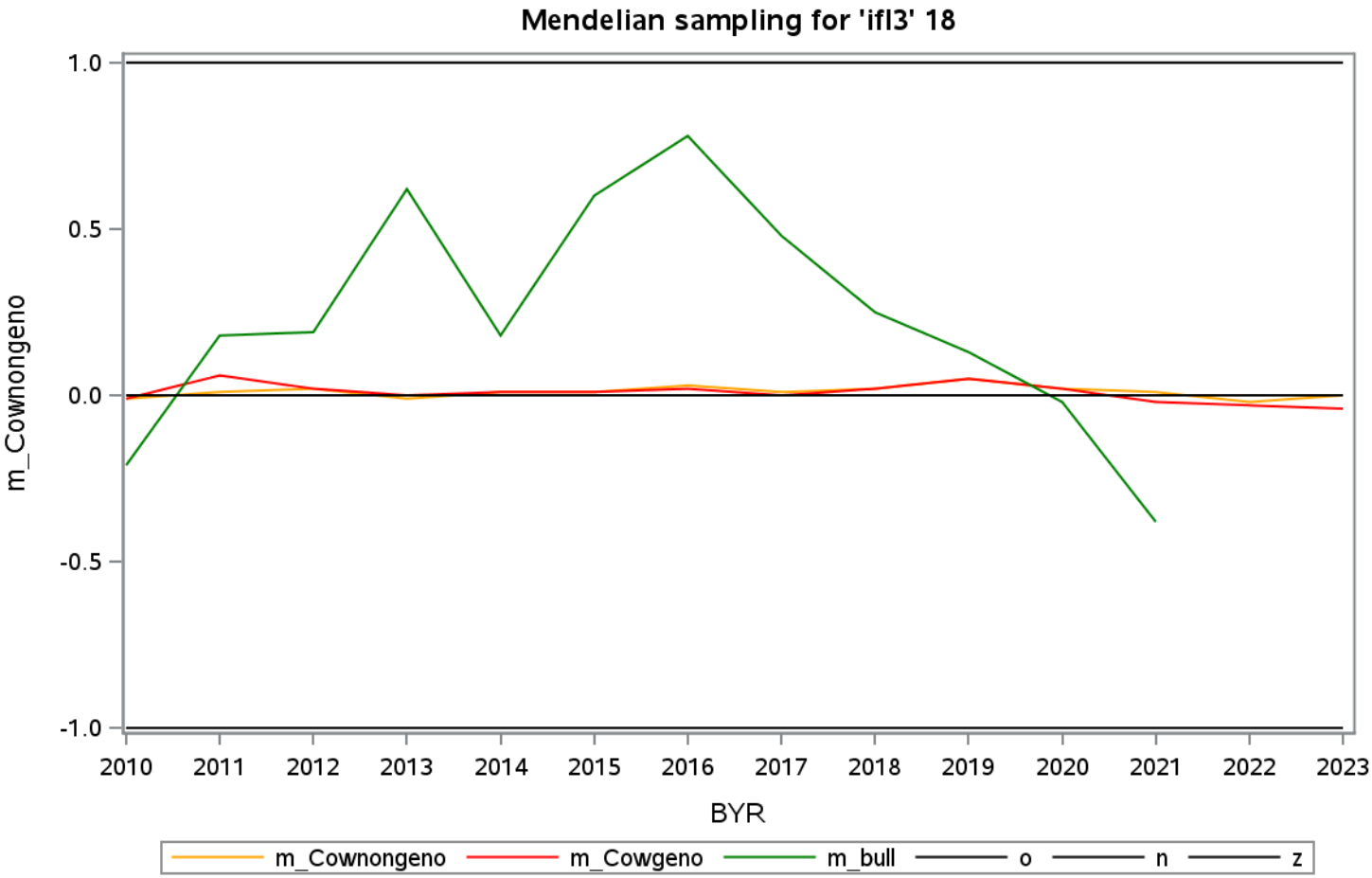
Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	-0.02	-0.06	-0.30	101149	3459	224
2	2011	-0.03	0.00	0.26	96371	5900	236
3	2012	-0.02	-0.04	0.10	86583	6460	242
4	2013	0.00	0.03	0.85	81763	6793	204
5	2014	0.00	-0.02	0.08	74150	7460	140
6	2015	-0.01	-0.02	0.74	63590	9570	119
7	2016	0.04	0.02	0.70	53779	13183	109
8	2017	0.02	0.02	0.27	45972	15387	100
9	2018	0.00	-0.01	0.21	39049	17181	91
10	2019	0.02	0.01	-0.06	33610	17479	71
11	2020	-0.01	0.00	0.06	30342	19931	62
12	2021	0.03	0.01	0.38	26282	20074	4
13	2022	0.02	0.01	.	16042	16028	.
14	2023	0.01	0.01	.	256	286	.



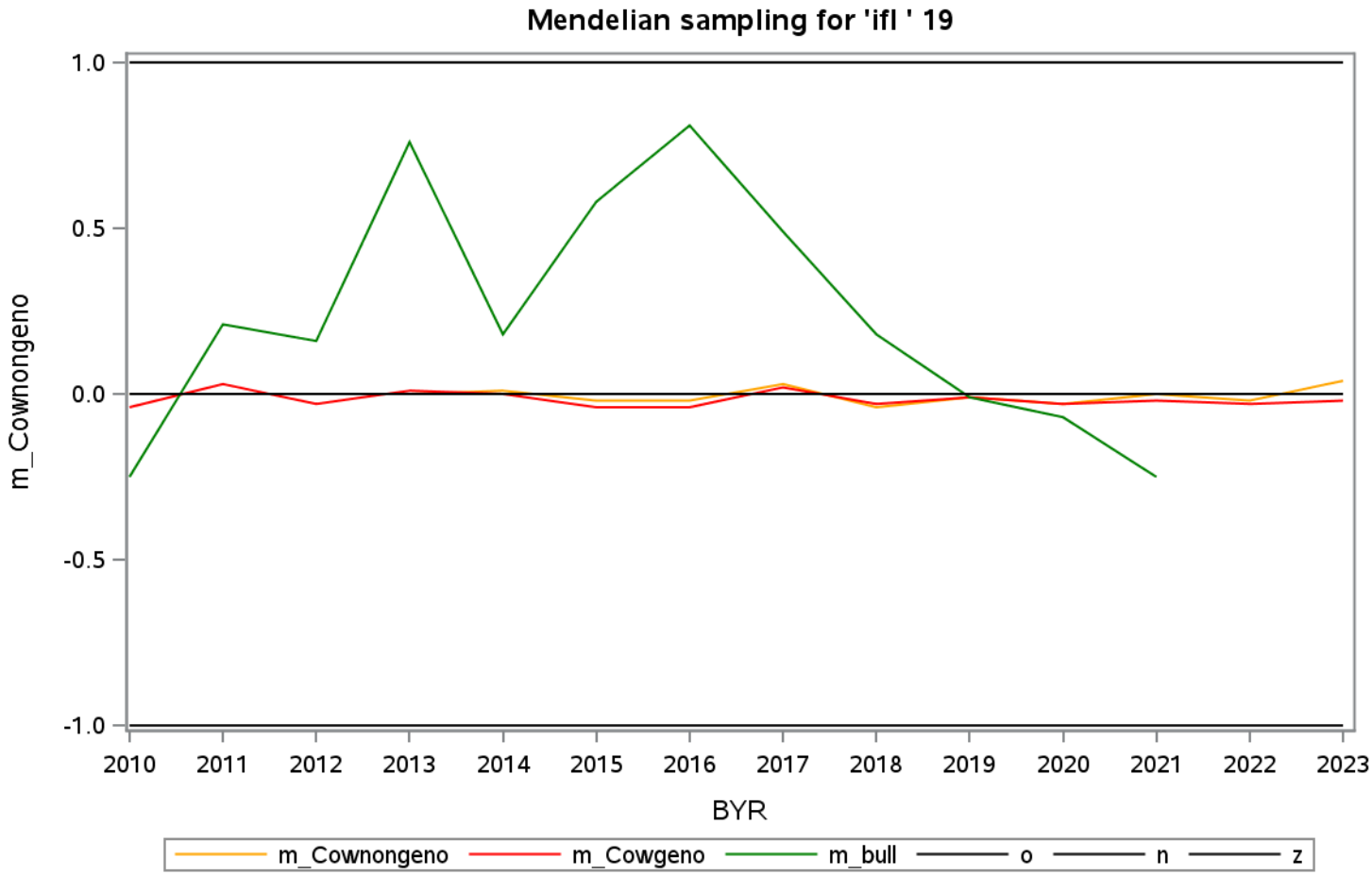
Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	-0.01	-0.03	-0.30	101149	3459	224
2	2011	0.01	0.05	0.25	96371	5900	236
3	2012	0.02	0.01	0.15	86583	6460	242
4	2013	0.01	0.03	0.72	81763	6793	204
5	2014	0.01	0.00	0.17	74150	7460	140
6	2015	0.03	0.02	0.58	63590	9570	119
7	2016	0.00	-0.01	0.87	53779	13183	109
8	2017	0.03	0.03	0.45	45972	15387	100
9	2018	0.02	0.02	0.19	39049	17181	91
10	2019	0.03	0.03	0.04	33610	17479	71
11	2020	-0.02	-0.02	-0.02	30342	19931	62
12	2021	0.04	0.03	0.00	26282	20074	4
13	2022	0.01	0.00	.	16042	16028	.
14	2023	0.02	-0.01	.	256	286	.



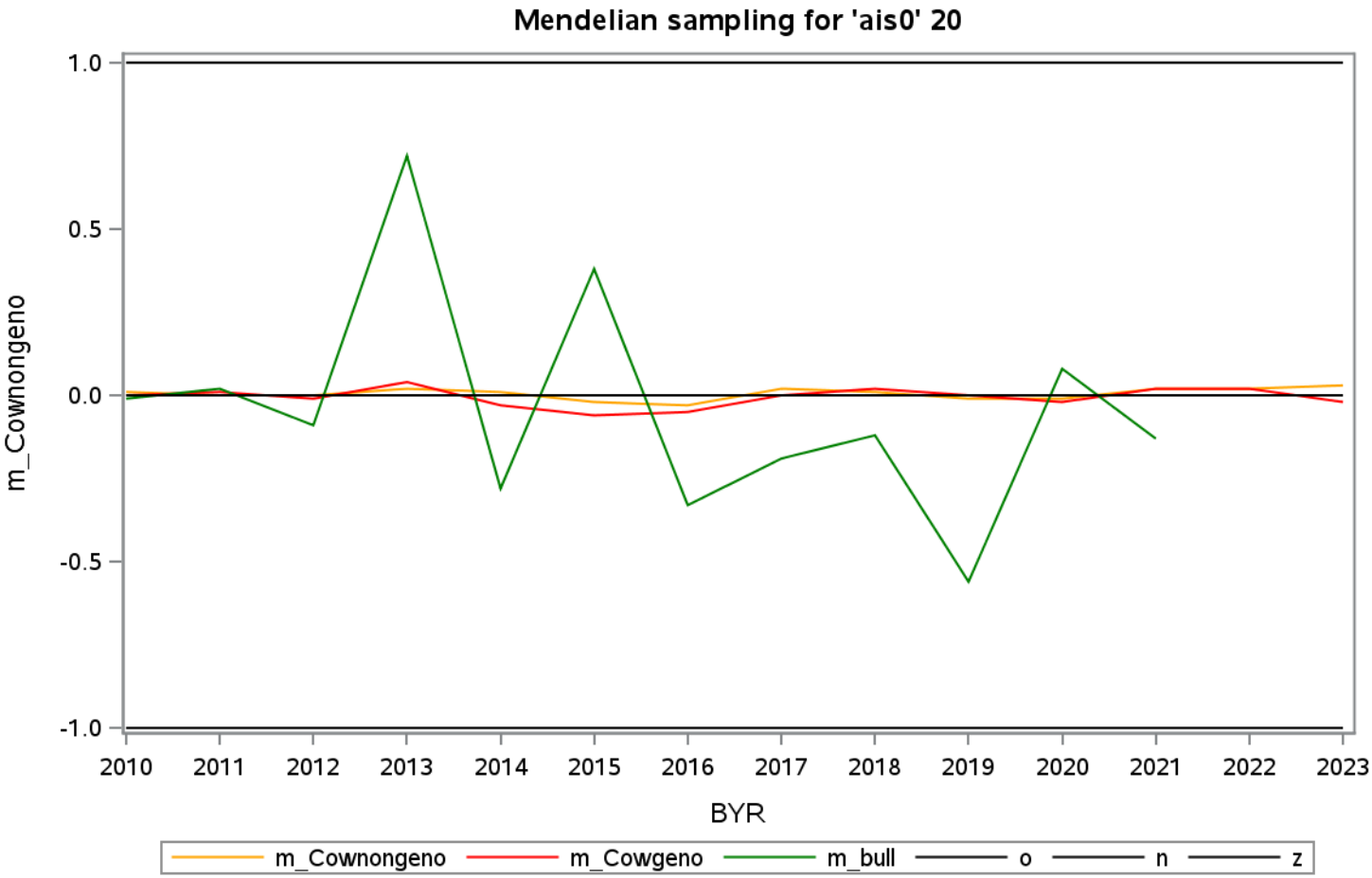
Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	-0.01	-0.01	-0.21	101149	3459	224
2	2011	0.01	0.06	0.18	96371	5900	236
3	2012	0.02	0.02	0.19	86583	6460	242
4	2013	-0.01	0.00	0.62	81763	6793	204
5	2014	0.01	0.01	0.18	74150	7460	140
6	2015	0.01	0.01	0.60	63590	9570	119
7	2016	0.03	0.02	0.78	53779	13183	109
8	2017	0.01	0.00	0.48	45972	15387	100
9	2018	0.02	0.02	0.25	39049	17181	91
10	2019	0.05	0.05	0.13	33610	17479	71
11	2020	0.02	0.02	-0.02	30342	19931	62
12	2021	0.01	-0.02	-0.38	26282	20074	4
13	2022	-0.02	-0.03	.	16042	16028	.
14	2023	0.00	-0.04	.	256	286	.



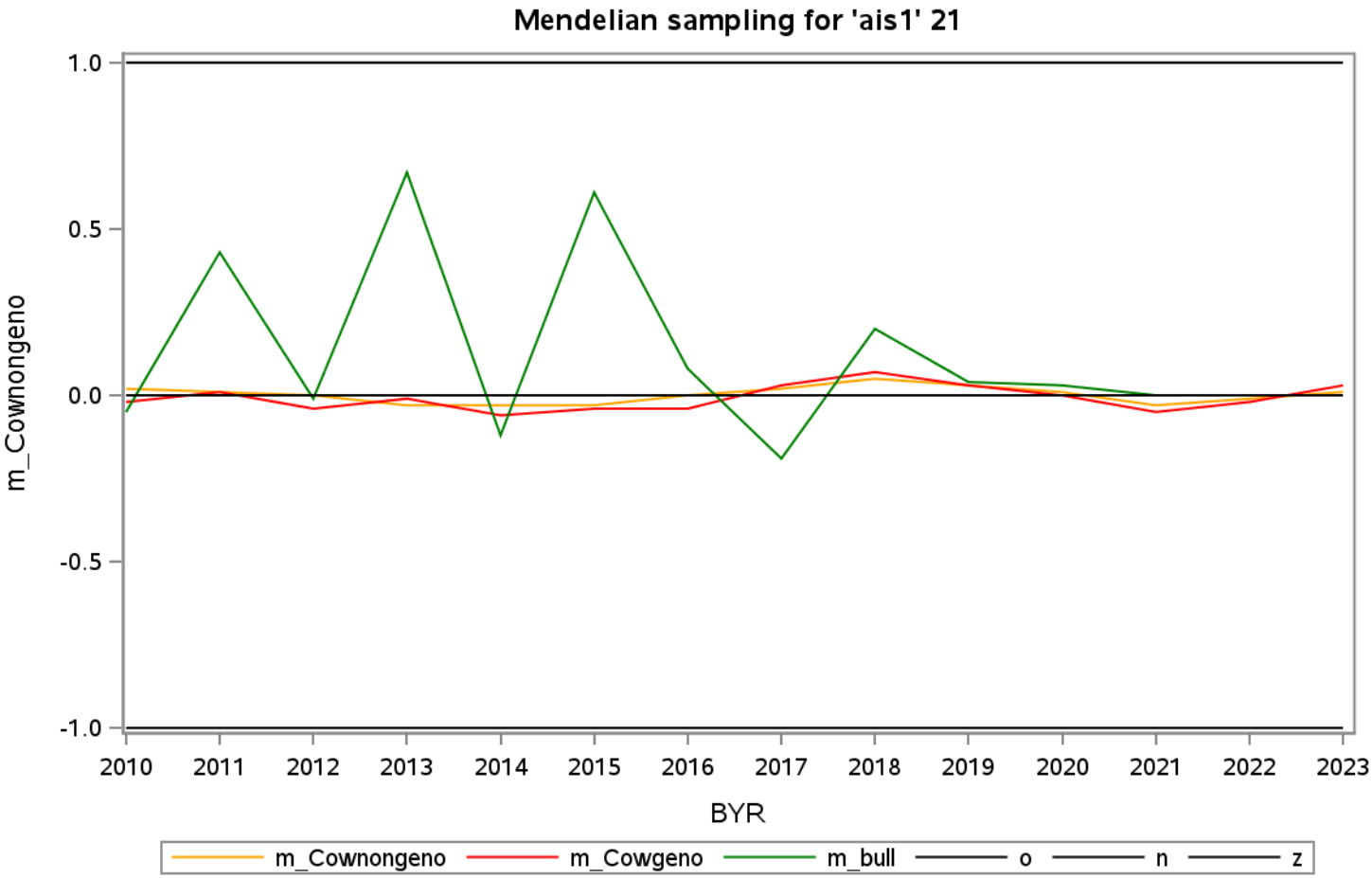
Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	0.00	-0.04	-0.25	101149	3459	224
2	2011	0.00	0.03	0.21	96371	5900	236
3	2012	0.00	-0.03	0.16	86583	6460	242
4	2013	0.00	0.01	0.76	81763	6793	204
5	2014	0.01	0.00	0.18	74150	7460	140
6	2015	-0.02	-0.04	0.58	63590	9570	119
7	2016	-0.02	-0.04	0.81	53779	13183	109
8	2017	0.03	0.02	0.49	45972	15387	100
9	2018	-0.04	-0.03	0.18	39049	17181	91
10	2019	-0.01	-0.01	-0.01	33610	17479	71
11	2020	-0.03	-0.03	-0.07	30342	19931	62
12	2021	0.00	-0.02	-0.25	26282	20074	4
13	2022	-0.02	-0.03	.	16042	16028	.
14	2023	0.04	-0.02	.	256	286	.



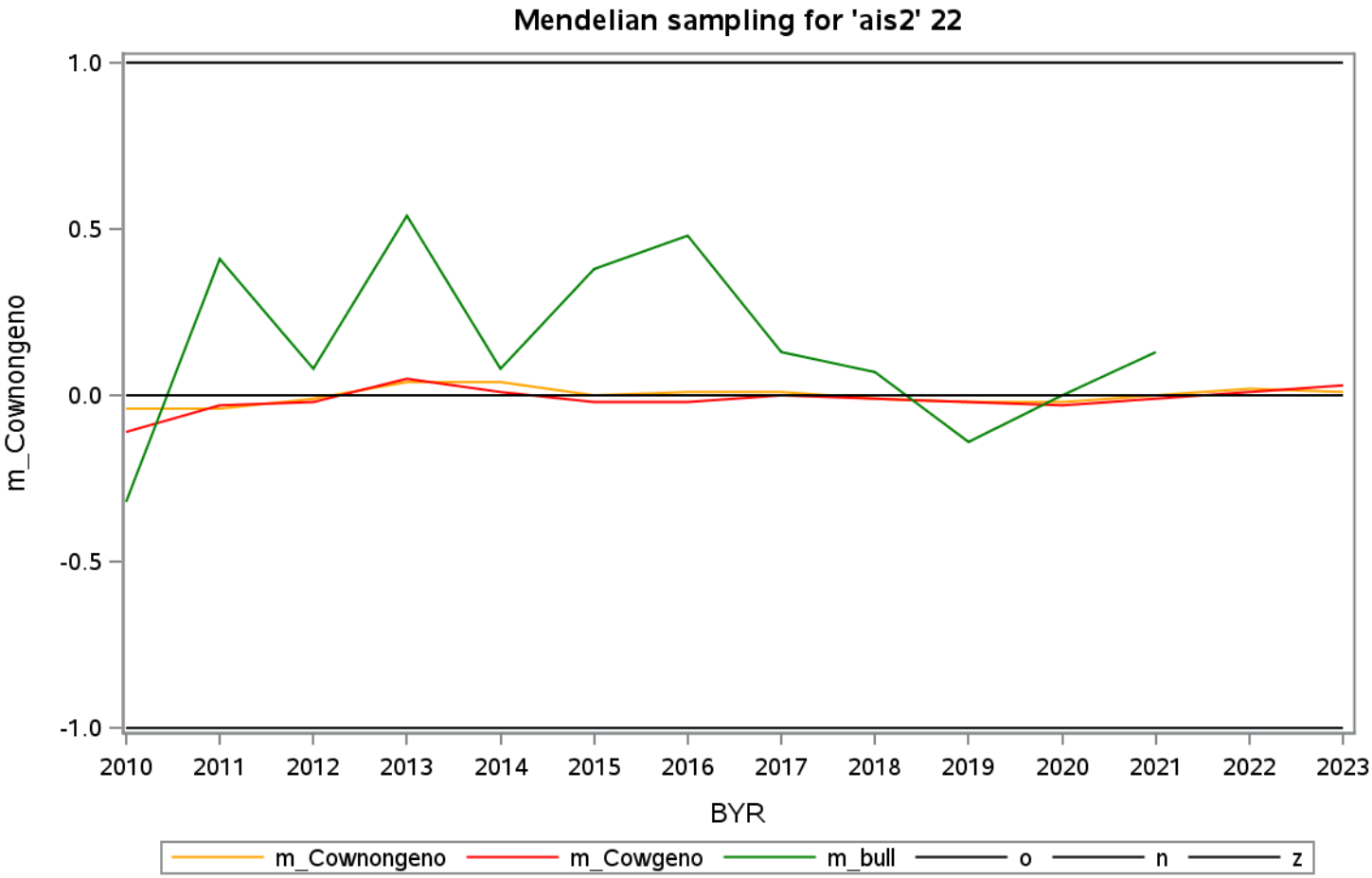
Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	0.01	0.00	-0.01	101149	3459	224
2	2011	0.00	0.01	0.02	96371	5900	236
3	2012	0.00	-0.01	-0.09	86583	6460	242
4	2013	0.02	0.04	0.72	81763	6793	204
5	2014	0.01	-0.03	-0.28	74150	7460	140
6	2015	-0.02	-0.06	0.38	63590	9570	119
7	2016	-0.03	-0.05	-0.33	53779	13183	109
8	2017	0.02	0.00	-0.19	45972	15387	100
9	2018	0.01	0.02	-0.12	39049	17181	91
10	2019	-0.01	0.00	-0.56	33610	17479	71
11	2020	-0.01	-0.02	0.08	30342	19931	62
12	2021	0.02	0.02	-0.13	26282	20074	4
13	2022	0.02	0.02	.	16042	16028	.
14	2023	0.03	-0.02	.	256	286	.



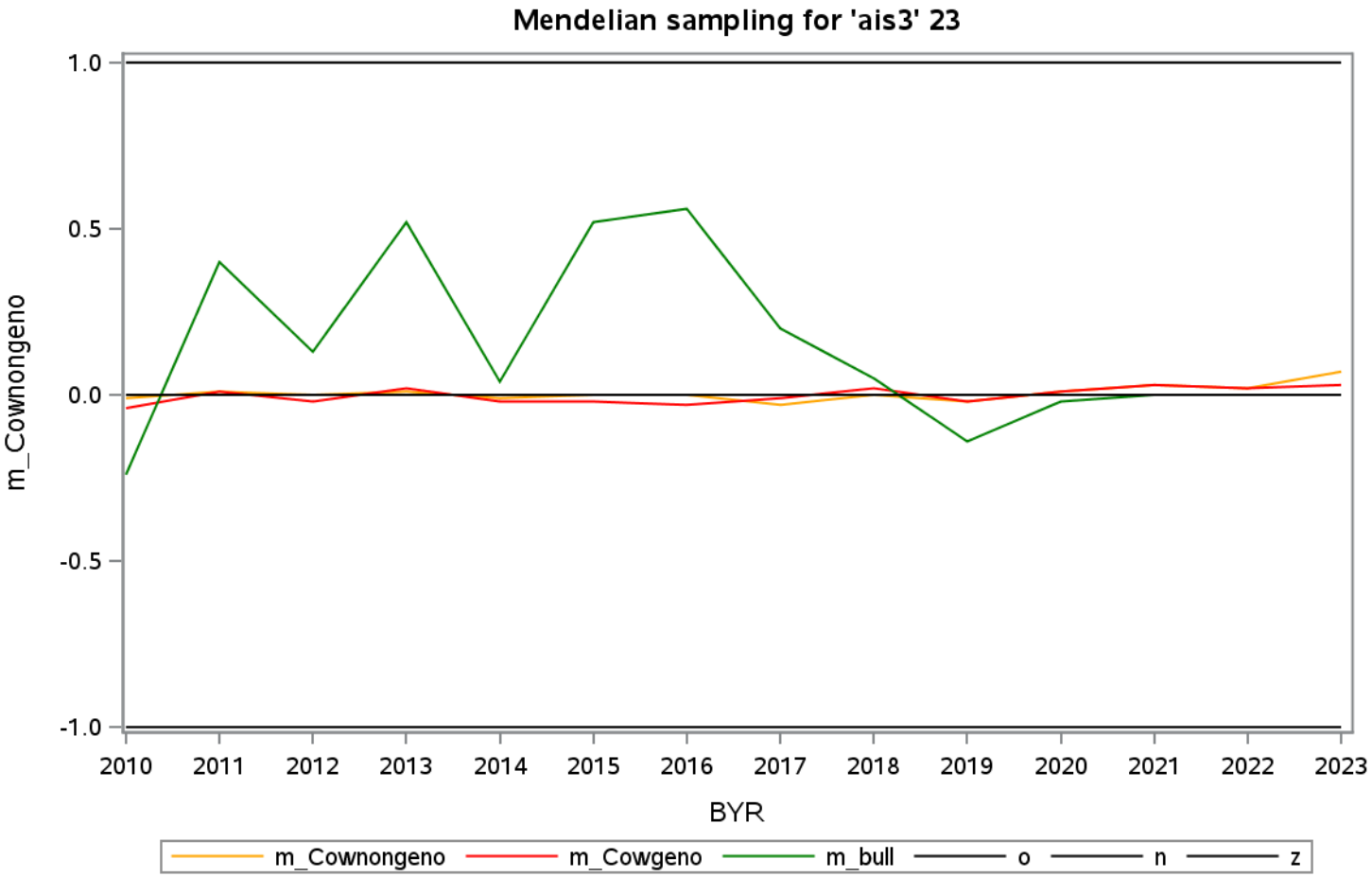
Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	0.02	-0.02	-0.05	101149	3459	224
2	2011	0.01	0.01	0.43	96371	5900	236
3	2012	0.00	-0.04	-0.01	86583	6460	242
4	2013	-0.03	-0.01	0.67	81763	6793	204
5	2014	-0.03	-0.06	-0.12	74150	7460	140
6	2015	-0.03	-0.04	0.61	63590	9570	119
7	2016	0.00	-0.04	0.08	53779	13183	109
8	2017	0.02	0.03	-0.19	45972	15387	100
9	2018	0.05	0.07	0.20	39049	17181	91
10	2019	0.03	0.03	0.04	33610	17479	71
11	2020	0.01	0.00	0.03	30342	19931	62
12	2021	-0.03	-0.05	0.00	26282	20074	4
13	2022	-0.01	-0.02	.	16042	16028	.
14	2023	0.01	0.03	.	256	286	.



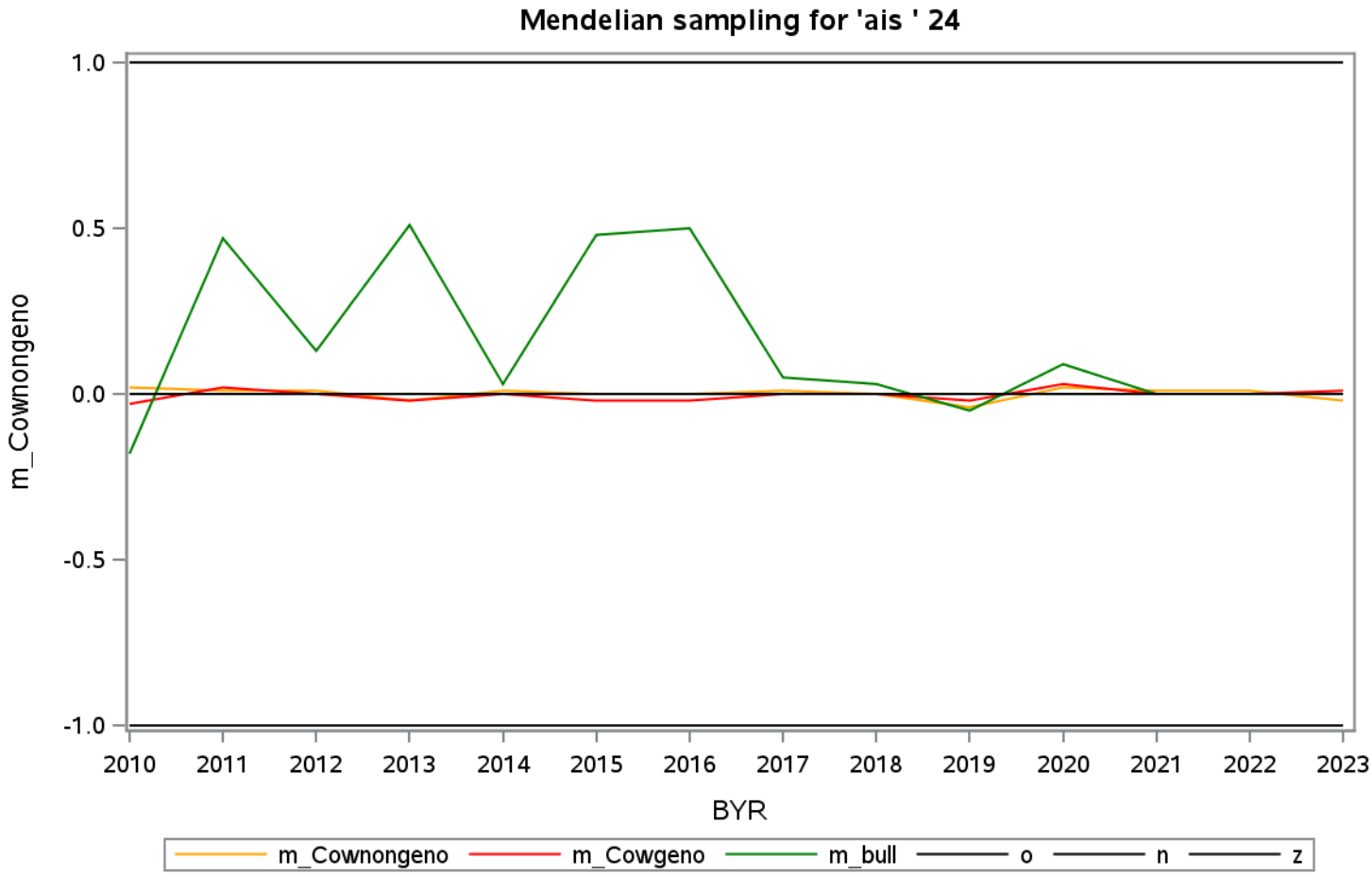
Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	-0.04	-0.11	-0.32	101149	3459	224
2	2011	-0.04	-0.03	0.41	96371	5900	236
3	2012	-0.01	-0.02	0.08	86583	6460	242
4	2013	0.04	0.05	0.54	81763	6793	204
5	2014	0.04	0.01	0.08	74150	7460	140
6	2015	0.00	-0.02	0.38	63590	9570	119
7	2016	0.01	-0.02	0.48	53779	13183	109
8	2017	0.01	0.00	0.13	45972	15387	100
9	2018	-0.01	-0.01	0.07	39049	17181	91
10	2019	-0.02	-0.02	-0.14	33610	17479	71
11	2020	-0.02	-0.03	0.00	30342	19931	62
12	2021	0.00	-0.01	0.13	26282	20074	4
13	2022	0.02	0.01	.	16042	16028	.
14	2023	0.01	0.03	.	256	286	.



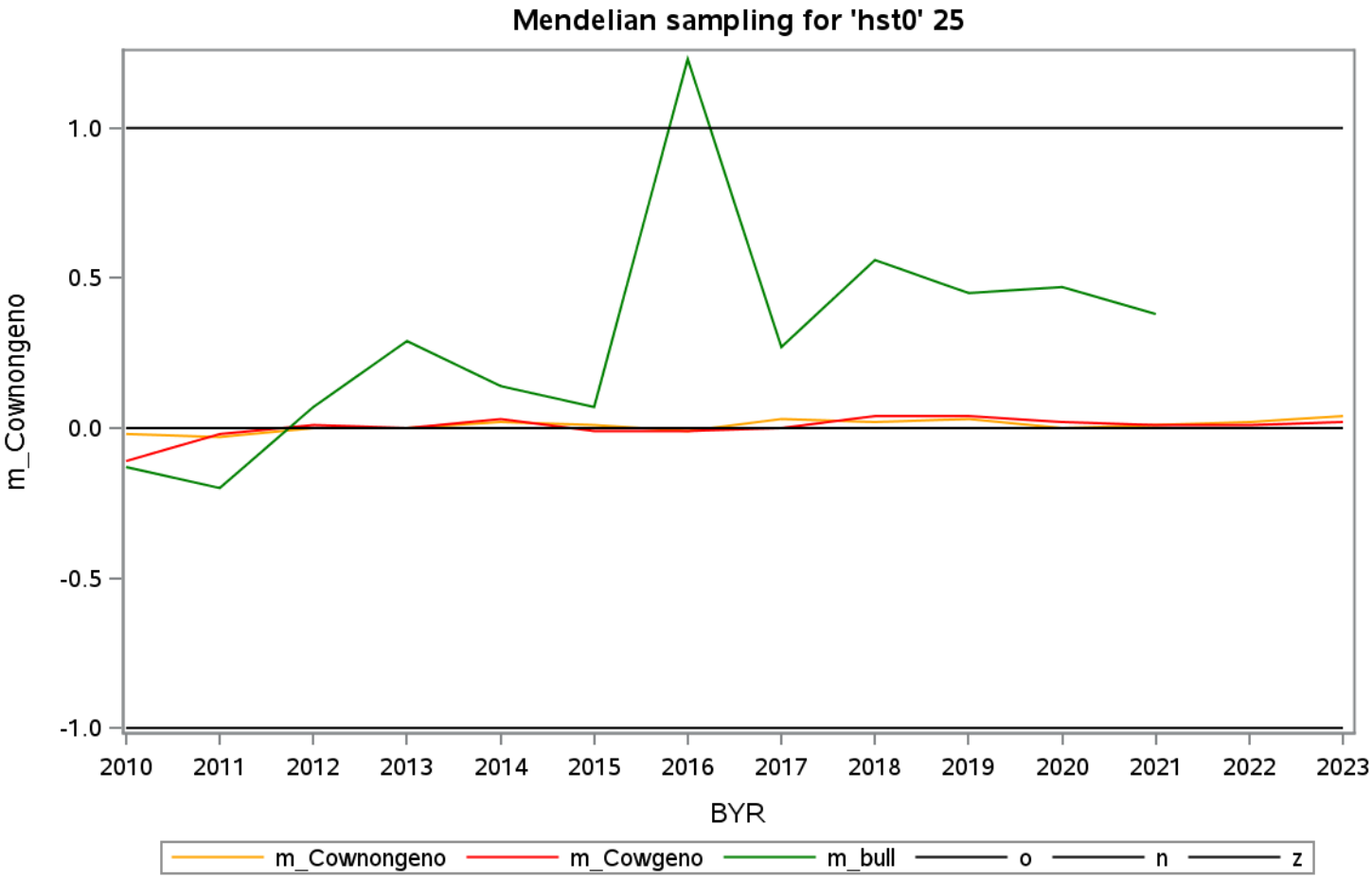
Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	-0.01	-0.04	-0.24	101149	3459	224
2	2011	0.01	0.01	0.40	96371	5900	236
3	2012	0.00	-0.02	0.13	86583	6460	242
4	2013	0.01	0.02	0.52	81763	6793	204
5	2014	-0.01	-0.02	0.04	74150	7460	140
6	2015	0.00	-0.02	0.52	63590	9570	119
7	2016	0.00	-0.03	0.56	53779	13183	109
8	2017	-0.03	-0.01	0.20	45972	15387	100
9	2018	0.00	0.02	0.05	39049	17181	91
10	2019	-0.02	-0.02	-0.14	33610	17479	71
11	2020	0.01	0.01	-0.02	30342	19931	62
12	2021	0.03	0.03	0.00	26282	20074	4
13	2022	0.02	0.02	.	16042	16028	.
14	2023	0.07	0.03	.	256	286	.



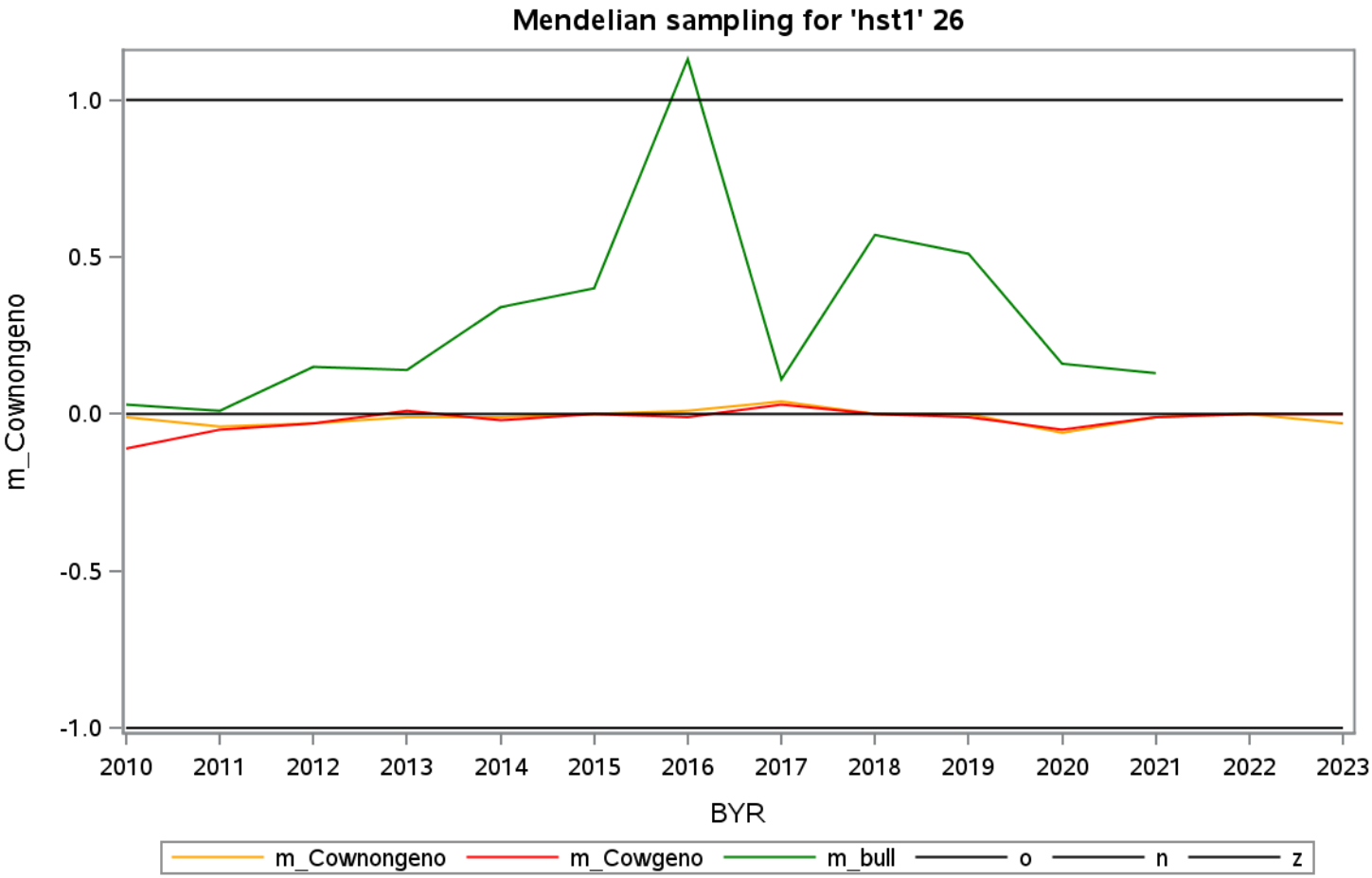
Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	0.02	-0.03	-0.18	101149	3459	224
2	2011	0.01	0.02	0.47	96371	5900	236
3	2012	0.01	0.00	0.13	86583	6460	242
4	2013	-0.02	-0.02	0.51	81763	6793	204
5	2014	0.01	0.00	0.03	74150	7460	140
6	2015	0.00	-0.02	0.48	63590	9570	119
7	2016	0.00	-0.02	0.50	53779	13183	109
8	2017	0.01	0.00	0.05	45972	15387	100
9	2018	0.00	0.00	0.03	39049	17181	91
10	2019	-0.04	-0.02	-0.05	33610	17479	71
11	2020	0.02	0.03	0.09	30342	19931	62
12	2021	0.01	0.00	0.00	26282	20074	4
13	2022	0.01	0.00	.	16042	16028	.
14	2023	-0.02	0.01	.	256	286	.



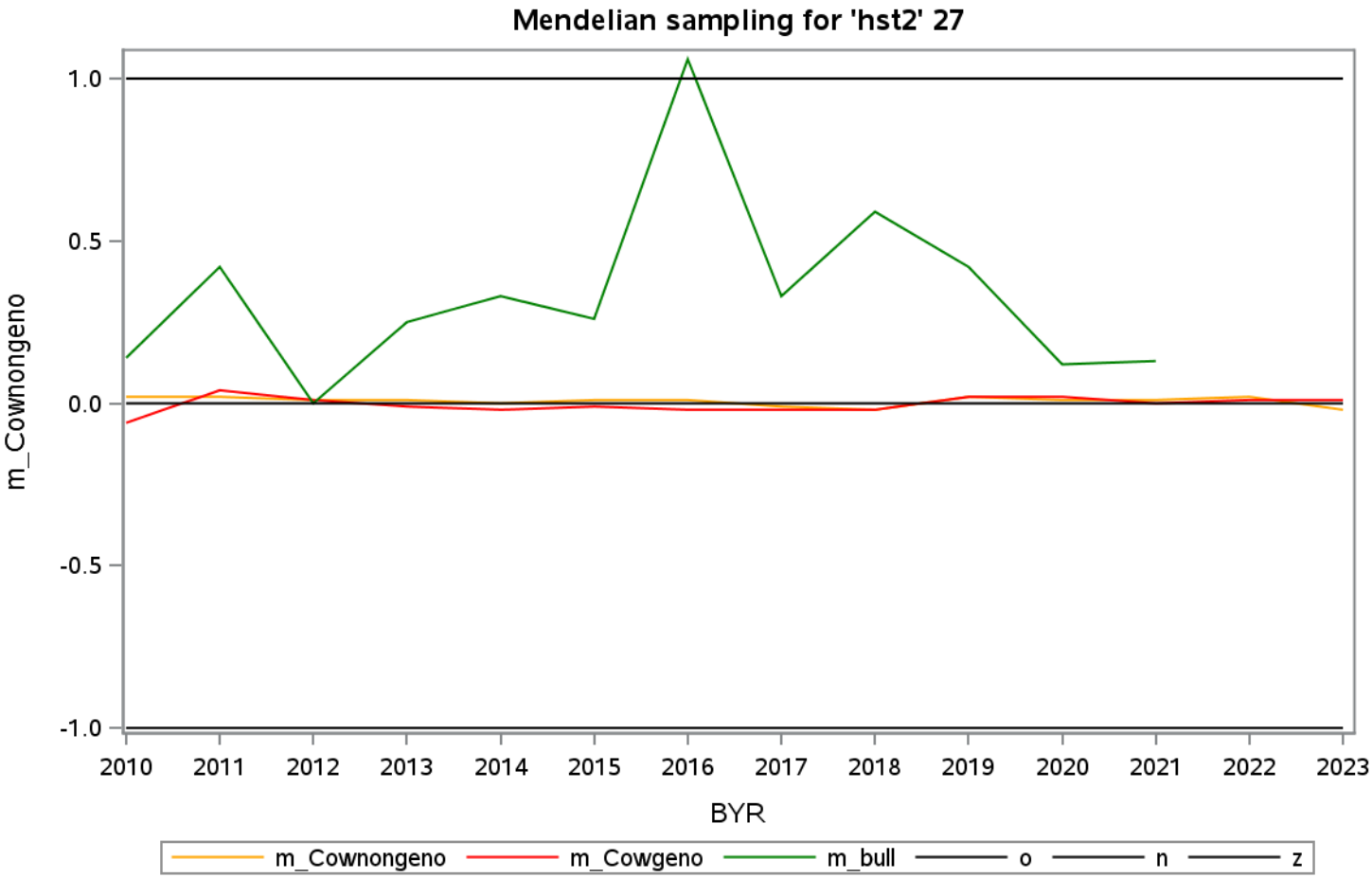
Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	-0.02	-0.11	-0.13	101149	3459	224
2	2011	-0.03	-0.02	-0.20	96371	5900	236
3	2012	0.00	0.01	0.07	86583	6460	242
4	2013	0.00	0.00	0.29	81763	6793	204
5	2014	0.02	0.03	0.14	74150	7460	140
6	2015	0.01	-0.01	0.07	63590	9570	119
7	2016	-0.01	-0.01	1.23	53779	13183	109
8	2017	0.03	0.00	0.27	45972	15387	100
9	2018	0.02	0.04	0.56	39049	17181	91
10	2019	0.03	0.04	0.45	33610	17479	71
11	2020	0.00	0.02	0.47	30342	19931	62
12	2021	0.01	0.01	0.38	26282	20074	4
13	2022	0.02	0.01	.	16042	16028	.
14	2023	0.04	0.02	.	256	286	.



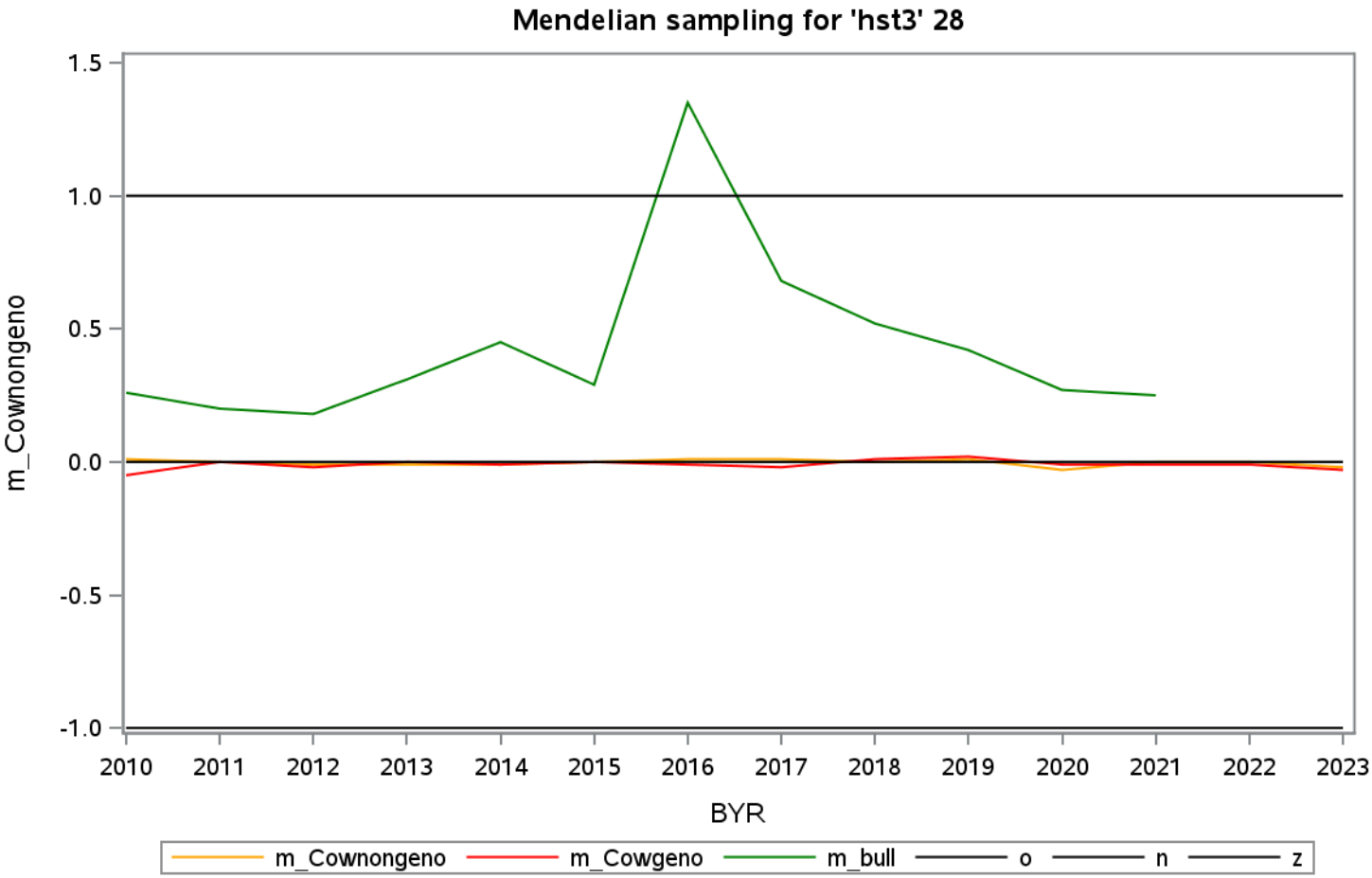
Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	-0.01	-0.11	0.03	101149	3459	224
2	2011	-0.04	-0.05	0.01	96371	5900	236
3	2012	-0.03	-0.03	0.15	86583	6460	242
4	2013	-0.01	0.01	0.14	81763	6793	204
5	2014	-0.01	-0.02	0.34	74150	7460	140
6	2015	0.00	0.00	0.40	63590	9570	119
7	2016	0.01	-0.01	1.13	53779	13183	109
8	2017	0.04	0.03	0.11	45972	15387	100
9	2018	0.00	0.00	0.57	39049	17181	91
10	2019	0.00	-0.01	0.51	33610	17479	71
11	2020	-0.06	-0.05	0.16	30342	19931	62
12	2021	-0.01	-0.01	0.13	26282	20074	4
13	2022	0.00	0.00	.	16042	16028	.
14	2023	-0.03	0.00	.	256	286	.



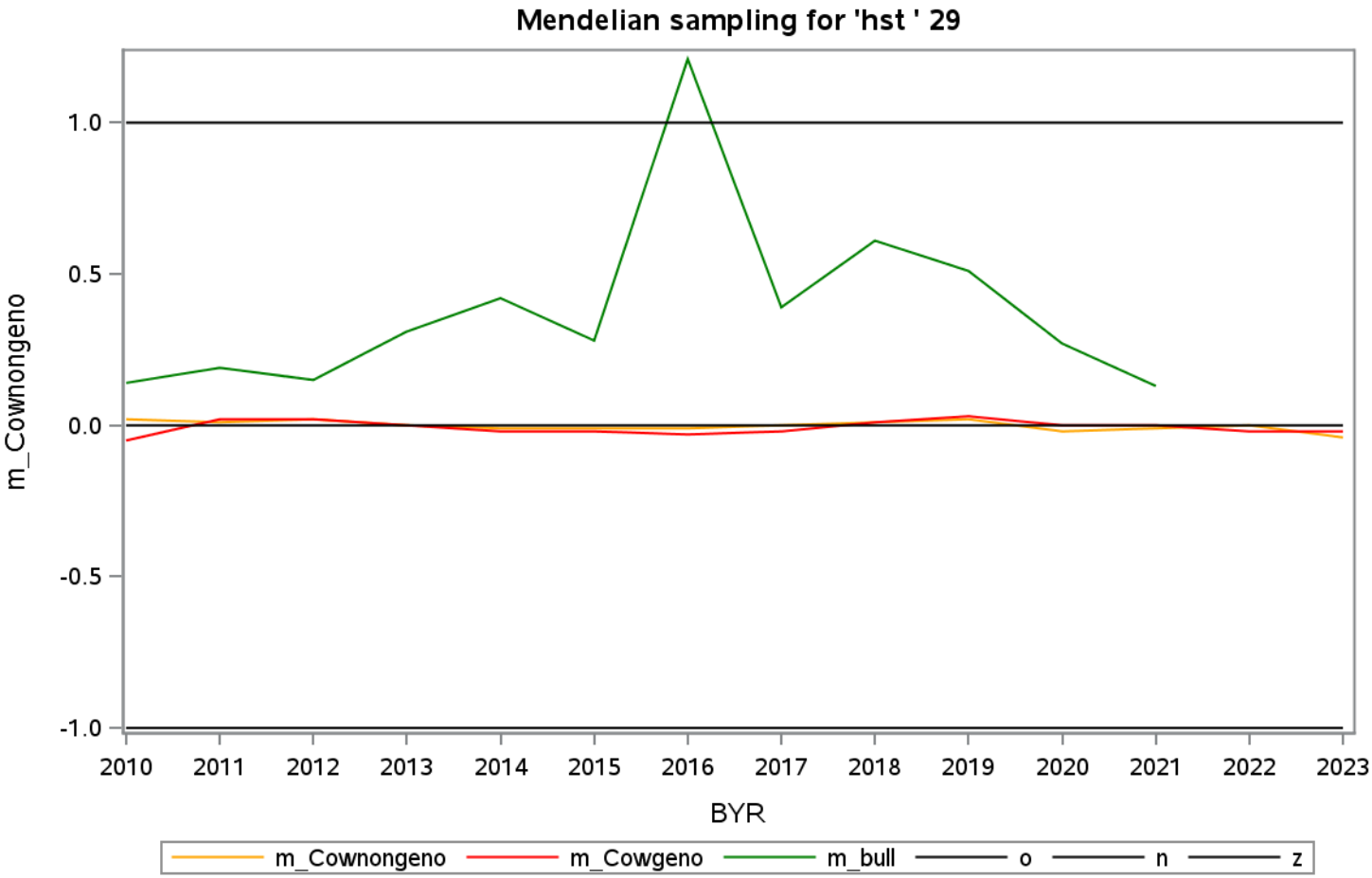
Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	0.02	-0.06	0.14	101149	3459	224
2	2011	0.02	0.04	0.42	96371	5900	236
3	2012	0.01	0.01	0.00	86583	6460	242
4	2013	0.01	-0.01	0.25	81763	6793	204
5	2014	0.00	-0.02	0.33	74150	7460	140
6	2015	0.01	-0.01	0.26	63590	9570	119
7	2016	0.01	-0.02	1.06	53779	13183	109
8	2017	-0.01	-0.02	0.33	45972	15387	100
9	2018	-0.02	-0.02	0.59	39049	17181	91
10	2019	0.02	0.02	0.42	33610	17479	71
11	2020	0.01	0.02	0.12	30342	19931	62
12	2021	0.01	0.00	0.13	26282	20074	4
13	2022	0.02	0.01	.	16042	16028	.
14	2023	-0.02	0.01	.	256	286	.



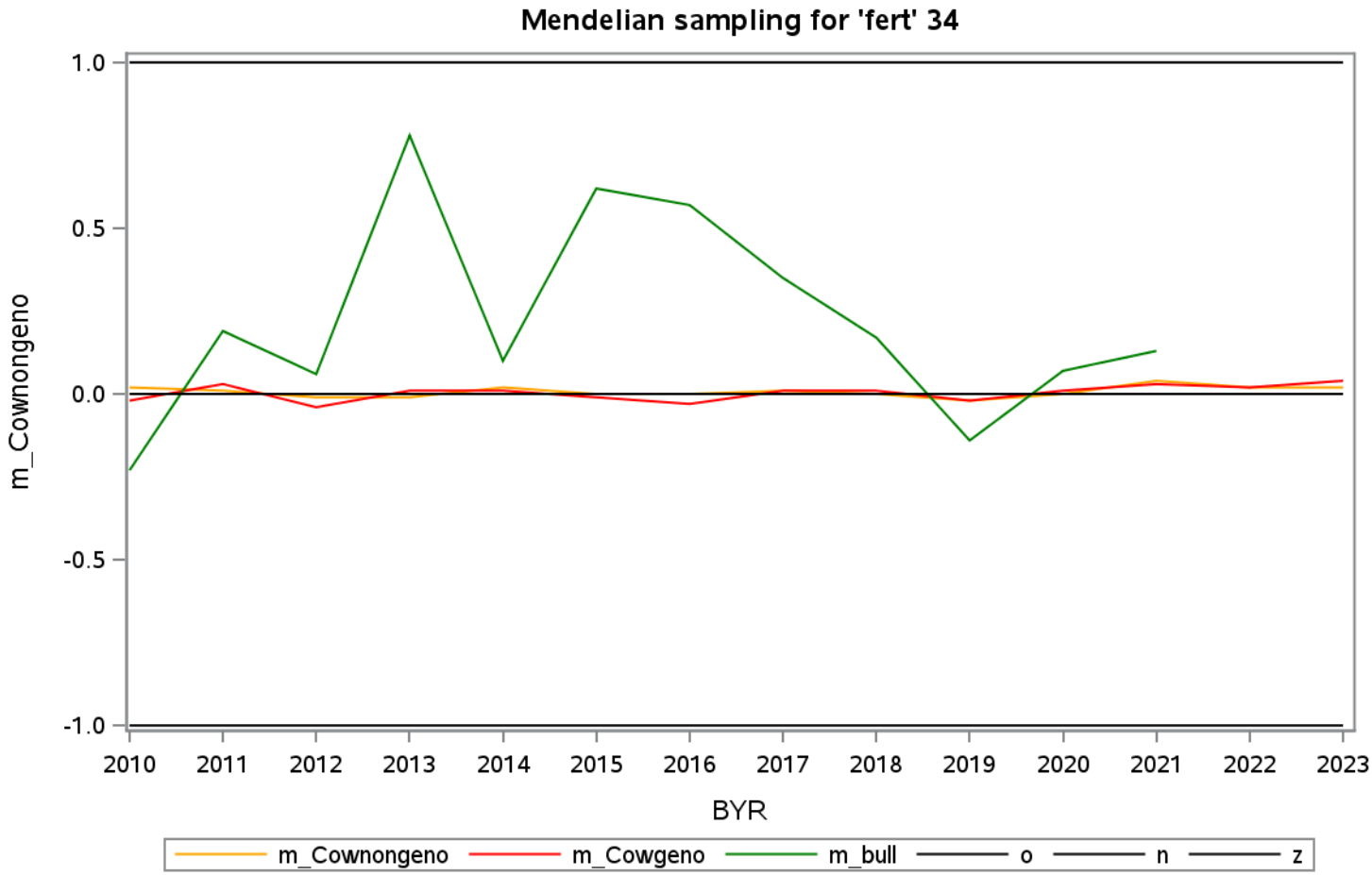
Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	0.01	-0.05	0.26	101149	3459	224
2	2011	0.00	0.00	0.20	96371	5900	236
3	2012	-0.01	-0.02	0.18	86583	6460	242
4	2013	-0.01	0.00	0.31	81763	6793	204
5	2014	-0.01	-0.01	0.45	74150	7460	140
6	2015	0.00	0.00	0.29	63590	9570	119
7	2016	0.01	-0.01	1.35	53779	13183	109
8	2017	0.01	-0.02	0.68	45972	15387	100
9	2018	0.00	0.01	0.52	39049	17181	91
10	2019	0.01	0.02	0.42	33610	17479	71
11	2020	-0.03	-0.01	0.27	30342	19931	62
12	2021	0.00	-0.01	0.25	26282	20074	4
13	2022	0.00	-0.01	.	16042	16028	.
14	2023	-0.02	-0.03	.	256	286	.



Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	0.02	-0.05	0.14	101149	3459	224
2	2011	0.01	0.02	0.19	96371	5900	236
3	2012	0.02	0.02	0.15	86583	6460	242
4	2013	0.00	0.00	0.31	81763	6793	204
5	2014	-0.01	-0.02	0.42	74150	7460	140
6	2015	-0.01	-0.02	0.28	63590	9570	119
7	2016	-0.01	-0.03	1.21	53779	13183	109
8	2017	0.00	-0.02	0.39	45972	15387	100
9	2018	0.01	0.01	0.61	39049	17181	91
10	2019	0.02	0.03	0.51	33610	17479	71
11	2020	-0.02	0.00	0.27	30342	19931	62
12	2021	-0.01	0.00	0.13	26282	20074	4
13	2022	0.00	-0.02	.	16042	16028	.
14	2023	-0.04	-0.02	.	256	286	.



Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	0.02	-0.02	-0.23	101149	3459	224
2	2011	0.01	0.03	0.19	96371	5900	236
3	2012	-0.01	-0.04	0.06	86583	6460	242
4	2013	-0.01	0.01	0.78	81763	6793	204
5	2014	0.02	0.01	0.10	74150	7460	140
6	2015	0.00	-0.01	0.62	63590	9570	119
7	2016	0.00	-0.03	0.57	53779	13183	109
8	2017	0.01	0.01	0.35	45972	15387	100
9	2018	0.00	0.01	0.17	39049	17181	91
10	2019	-0.02	-0.02	-0.14	33610	17479	71
11	2020	0.00	0.01	0.07	30342	19931	62
12	2021	0.04	0.03	0.13	26282	20074	4
13	2022	0.02	0.02	.	16042	16028	.
14	2023	0.02	0.04	.	256	286	.



RDC reliability for SS and traditional 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	cr0	92871	29.2	30.8	4.2	4.8	-1.6	3.5	0.71
2	2011	cr0	90413	29.9	31.2	3.9	4.5	-1.3	3.8	0.59
3	2012	cr0	83190	30.1	30.9	4.0	4.6	-0.8	4.3	0.51
4	2013	cr0	80428	30.4	31.0	4.3	4.5	-0.6	4.5	0.47
5	2014	cr0	74037	30.8	30.8	4.6	4.4	0.0	4.8	0.44
6	2015	cr0	64067	31.0	30.4	4.7	4.3	0.6	4.9	0.41
7	2016	cr0	54918	31.2	30.9	4.5	3.6	0.3	4.6	0.39
8	2017	cr0	47379	31.0	30.8	4.2	3.6	0.2	4.4	0.38
9	2018	cr0	41421	31.0	30.9	4.0	3.5	0.1	4.3	0.36
10	2019	cr0	36077	30.6	30.2	3.6	3.8	0.3	4.1	0.37
11	2020	cr0	34240	30.0	29.8	3.1	4.0	0.2	3.8	0.43
12	2021	cr0	30666	29.4	28.3	2.7	4.5	1.1	3.9	0.50
13	2022	cr0	10791	29.1	25.6	2.5	4.9	3.5	4.5	0.42
14	2010	cr	101952	32.8	33.2	5.5	4.4	-0.4	4.2	0.66
15	2011	cr	98707	33.2	33.5	5.4	4.2	-0.3	4.4	0.61
16	2012	cr	90856	33.3	33.2	5.5	4.4	0.1	4.7	0.56
17	2013	cr	87609	33.5	33.3	5.7	4.2	0.2	4.9	0.55
18	2014	cr	80589	33.7	33.1	5.9	4.2	0.6	5.1	0.53
19	2015	cr	70067	33.9	32.9	6.0	4.1	1.0	5.2	0.51
20	2016	cr	60099	34.0	33.3	5.8	3.6	0.7	5.0	0.52
21	2017	cr	51944	33.7	33.2	5.5	3.6	0.5	4.7	0.52
22	2018	cr	45402	33.4	33.1	5.2	3.6	0.3	4.6	0.51
23	2019	cr	39505	32.2	32.2	4.4	3.8	0.1	4.2	0.48
24	2020	cr	37005	30.9	31.0	3.6	4.1	-0.1	3.9	0.50
25	2021	cr	31537	29.9	28.1	3.0	4.9	1.8	4.3	0.48
26	2022	cr	10793	29.6	23.7	2.7	5.2	5.9	5.0	0.36
27	2010	nrr0	87004	26.5	29.8	4.8	5.2	-3.3	2.5	0.87
28	2011	nrr0	84873	27.6	30.2	4.1	4.8	-2.7	2.9	0.80
29	2012	nrr0	78164	28.0	30.0	4.0	5.0	-2.1	3.3	0.74
30	2013	nrr0	75660	28.4	30.2	4.1	4.8	-1.8	3.6	0.68
31	2014	nrr0	69764	28.7	29.9	4.3	4.7	-1.2	3.9	0.63
32	2015	nrr0	60274	29.0	29.4	4.3	4.6	-0.5	4.1	0.59
33	2016	nrr0	51770	29.4	30.1	4.0	3.8	-0.6	3.8	0.53
34	2017	nrr0	44309	29.4	30.0	3.7	3.8	-0.6	3.7	0.52
35	2018	nrr0	38844	29.5	30.1	3.6	3.7	-0.6	3.7	0.50
36	2019	nrr0	33811	29.3	29.6	3.3	3.9	-0.3	3.5	0.53
37	2020	nrr0	31937	29.1	29.6	2.9	3.9	-0.5	3.2	0.60

RDC reliability for SS and traditional for nongenotyped females with phenotype

Obs	BYR	name	no	mean_ss	mean_e	std_ss	std_e	mean_dif	std_dif	corr_SS
38	2021	nrr0	29093	28.7	28.9	2.7	4.3	-0.2	3.2	0.67
39	2022	nrr0	17236	28.6	27.0	2.5	4.6	1.5	3.7	0.61
40	2023	nrr0	12	.	.	.	.	.	.	0.12
41	2010	nrr	99755	27.0	31.4	4.5	4.8	-4.4	2.5	0.86
42	2011	nrr	96639	28.0	31.8	3.9	4.5	-3.8	2.8	0.78
43	2012	nrr	88965	28.3	31.5	3.9	4.7	-3.2	3.3	0.73
44	2013	nrr	85842	28.7	31.6	4.1	4.5	-2.9	3.5	0.68
45	2014	nrr	78993	29.0	31.4	4.3	4.5	-2.4	3.7	0.64
46	2015	nrr	68770	29.2	31.1	4.3	4.4	-1.9	3.9	0.61
47	2016	nrr	58987	29.6	31.6	4.0	3.8	-2.1	3.6	0.57
48	2017	nrr	50910	29.4	31.5	3.7	3.8	-2.1	3.4	0.58
49	2018	nrr	44579	29.4	31.5	3.6	3.8	-2.0	3.4	0.58
50	2019	nrr	38737	29.1	30.7	3.4	4.0	-1.6	3.3	0.62
51	2020	nrr	36407	28.9	30.0	3.1	4.2	-1.1	3.2	0.66
52	2021	nrr	31024	28.6	27.4	3.0	5.0	1.2	4.0	0.59
53	2022	nrr	17249	28.5	22.0	2.7	5.4	6.5	5.0	0.39
54	2023	nrr	12	.	.	.	.	.	.	0.37
55	2010	icf	79923	29.7	35.1	4.2	3.9	-5.4	2.8	0.76
56	2011	icf	77844	30.4	35.4	4.0	3.7	-5.0	3.1	0.69
57	2012	icf	71131	30.7	35.2	4.2	4.0	-4.5	3.5	0.63
58	2013	icf	67079	31.1	35.3	4.5	3.8	-4.2	3.8	0.59
59	2014	icf	60968	31.4	35.1	4.8	3.8	-3.7	4.2	0.55
60	2015	icf	54000	31.6	34.9	4.9	3.8	-3.4	4.3	0.53
61	2016	icf	46610	31.7	35.3	4.7	3.3	-3.6	4.1	0.51
62	2017	icf	40096	31.4	35.1	4.3	3.3	-3.7	3.9	0.50
63	2018	icf	35129	31.3	35.0	4.1	3.3	-3.7	3.8	0.50
64	2019	icf	30118	30.6	34.3	3.7	3.5	-3.7	3.6	0.51
65	2020	icf	27990	29.9	33.3	3.2	3.7	-3.5	3.3	0.56
66	2021	icf	13486	29.4	31.6	3.0	4.3	-2.2	3.7	0.53
67	2022	icf	16	.	.	.	.	.	.	0.55
68	2010	ifl0	82201	26.4	29.6	4.9	5.3	-3.2	2.5	0.88
69	2011	ifl0	80671	27.5	30.1	4.1	4.9	-2.6	2.9	0.80
70	2012	ifl0	74834	27.9	29.9	4.0	5.0	-2.0	3.3	0.75
71	2013	ifl0	72693	28.3	30.0	4.2	4.8	-1.7	3.6	0.69
72	2014	ifl0	67217	28.7	29.7	4.3	4.8	-1.1	3.9	0.64
73	2015	ifl0	57970	28.9	29.3	4.4	4.6	-0.3	4.1	0.59
74	2016	ifl0	49766	29.4	29.9	4.0	3.8	-0.5	3.8	0.53

RDC reliability for SS and traditional for nongenotyped females with phenotype

Obs	BYR	name	no	mean_ss	mean_e	std_ss	std_e	mean_dif	std_dif	corr_SS
75	2017	ifl0	42586	29.4	29.8	3.7	3.8	-0.4	3.7	0.52
76	2018	ifl0	37299	29.4	29.9	3.6	3.8	-0.5	3.7	0.51
77	2019	ifl0	32430	29.3	29.4	3.3	3.9	-0.2	3.5	0.54
78	2020	ifl0	30757	29.0	29.4	2.9	4.0	-0.4	3.2	0.60
79	2021	ifl0	28040	28.7	28.7	2.7	4.3	0.0	3.2	0.67
80	2022	ifl0	16839	28.5	26.9	2.5	4.6	1.6	3.7	0.61
81	2023	ifl0	12	.	.	.	.	.	.	0.11
82	2010	ifl	98371	28.5	33.4	4.2	4.3	-4.9	2.6	0.81
83	2011	ifl	95546	29.2	33.7	3.9	4.1	-4.5	2.9	0.73
84	2012	ifl	88130	29.5	33.5	4.0	4.3	-4.0	3.3	0.68
85	2013	ifl	85015	29.8	33.6	4.2	4.1	-3.7	3.5	0.64
86	2014	ifl	78308	30.1	33.4	4.5	4.1	-3.3	3.8	0.60
87	2015	ifl	68184	30.3	33.1	4.5	4.1	-2.8	4.0	0.58
88	2016	ifl	58536	30.5	33.6	4.3	3.6	-3.1	3.8	0.55
89	2017	ifl	50440	30.3	33.5	3.9	3.6	-3.1	3.6	0.54
90	2018	ifl	44138	30.3	33.4	3.8	3.6	-3.1	3.5	0.54
91	2019	ifl	38305	29.8	32.7	3.5	3.7	-2.9	3.4	0.56
92	2020	ifl	36021	29.3	31.9	3.1	3.9	-2.5	3.2	0.60
93	2021	ifl	30227	28.9	29.1	2.9	4.9	-0.2	4.1	0.56
94	2022	ifl	16853	28.8	23.1	2.6	5.6	5.6	5.3	0.34
95	2023	ifl	12	.	.	.	.	.	.	0.44
96	2010	ais0	85079	27.3	31.7	4.3	4.4	-4.4	2.6	0.83
97	2011	ais0	83135	28.2	32.1	3.8	4.1	-3.9	2.9	0.74
98	2012	ais0	76710	28.5	31.9	3.8	4.3	-3.4	3.3	0.67
99	2013	ais0	74200	28.9	32.1	4.0	4.1	-3.1	3.6	0.61
100	2014	ais0	68233	29.3	31.8	4.3	4.1	-2.6	3.9	0.56
101	2015	ais0	58950	29.5	31.5	4.3	4.0	-2.0	4.1	0.53
102	2016	ais0	50700	29.9	32.1	4.1	3.3	-2.2	3.8	0.48
103	2017	ais0	43401	29.8	32.0	3.8	3.3	-2.2	3.7	0.47
104	2018	ais0	37998	29.8	32.1	3.7	3.2	-2.2	3.6	0.46
105	2019	ais0	33109	29.6	31.6	3.3	3.4	-2.0	3.4	0.48
106	2020	ais0	31255	29.3	31.4	2.9	3.5	-2.0	3.1	0.54
107	2021	ais0	28778	29.0	30.6	2.6	3.9	-1.6	3.0	0.63
108	2022	ais0	17372	28.8	28.9	2.4	4.4	-0.1	3.5	0.59
109	2023	ais0	12	.	.	.	.	.	.	0.02
110	2010	ais	99326	28.1	33.0	4.2	4.3	-4.9	2.6	0.82
111	2011	ais	96216	28.9	33.4	3.9	4.1	-4.5	2.9	0.74

RDC reliability for SS and traditional for nongenotyped females with phenotype

Obs	BYR	name	no	mean_ss	mean_e	std_ss	std_e	mean_dif	std_dif	corr_SS
112	2012	ais	88569	29.2	33.1	4.0	4.3	-4.0	3.3	0.69
113	2013	ais	85373	29.5	33.2	4.2	4.1	-3.7	3.5	0.64
114	2014	ais	78553	29.8	33.0	4.4	4.1	-3.2	3.8	0.61
115	2015	ais	68394	30.0	32.8	4.5	4.1	-2.8	3.9	0.58
116	2016	ais	58714	30.3	33.3	4.2	3.6	-3.0	3.7	0.56
117	2017	ais	50690	30.1	33.1	3.9	3.5	-3.0	3.5	0.55
118	2018	ais	44384	30.1	33.1	3.8	3.5	-3.0	3.5	0.55
119	2019	ais	38535	29.6	32.4	3.5	3.7	-2.8	3.3	0.58
120	2020	ais	36173	29.2	31.7	3.1	3.9	-2.5	3.1	0.62
121	2021	ais	30820	28.9	29.7	2.9	4.5	-0.8	3.6	0.62
122	2022	ais	17382	28.7	25.9	2.6	5.0	2.8	4.3	0.49
123	2023	ais	12	.	.	.	.	.	.	0.29
124	2010	hst0	29814	27.5	32.1	3.8	3.8	-4.6	2.3	0.83
125	2011	hst0	29377	28.1	32.0	3.5	3.9	-3.9	2.7	0.75
126	2012	hst0	27298	28.3	31.5	3.5	4.3	-3.2	3.1	0.70
127	2013	hst0	26143	28.5	31.3	3.6	4.2	-2.8	3.3	0.66
128	2014	hst0	23635	28.9	31.1	3.7	4.0	-2.2	3.5	0.60
129	2015	hst0	20385	29.0	30.7	3.6	4.0	-1.7	3.6	0.56
130	2016	hst0	17603	29.4	31.1	3.4	3.4	-1.6	3.4	0.49
131	2017	hst0	16083	29.5	31.0	3.1	3.3	-1.4	3.4	0.44
132	2018	hst0	14930	29.6	31.0	3.1	3.2	-1.4	3.4	0.40
133	2019	hst0	13577	29.4	30.2	2.7	3.5	-0.9	3.3	0.45
134	2020	hst0	12532	29.1	29.9	2.4	3.8	-0.8	3.2	0.55
135	2021	hst0	11108	28.7	28.7	2.2	4.3	0.1	3.4	0.60
136	2022	hst0	5301	28.6	25.5	2.1	4.9	3.0	4.3	0.50
137	2023	hst0	1	.	.	.	.	.	.	.
138	2010	hst	37159	27.8	32.9	3.8	3.7	-5.1	2.3	0.82
139	2011	hst	36378	28.3	32.8	3.4	3.8	-4.5	2.6	0.75
140	2012	hst	33613	28.6	32.4	3.4	4.2	-3.8	3.0	0.71
141	2013	hst	32064	28.8	32.2	3.6	4.1	-3.4	3.1	0.68
142	2014	hst	29014	29.1	32.1	3.6	4.0	-3.0	3.3	0.63
143	2015	hst	25239	29.2	31.7	3.5	3.9	-2.5	3.3	0.60
144	2016	hst	21940	29.6	32.1	3.3	3.4	-2.5	3.2	0.54
145	2017	hst	20194	29.6	32.0	3.0	3.3	-2.4	3.1	0.50
146	2018	hst	18592	29.7	32.0	2.9	3.2	-2.3	3.1	0.48
147	2019	hst	16492	29.3	31.1	2.6	3.6	-1.8	3.1	0.54
148	2020	hst	15152	28.9	30.3	2.5	3.9	-1.4	3.1	0.62

RDC reliability for SS and traditional for nongenotyped females with phenotype

Obs	BYR	name	no	mean_ss	mean_e	std_ss	std_e	mean_dif	std_dif	corr_SS
149	2021	hst	12005	28.6	28.0	2.4	4.7	0.6	3.8	0.60
150	2022	hst	5306	28.5	23.0	2.3	5.5	5.4	5.0	0.41
151	2023	hst	1	.	.	.	.	.	.	.
152	2010	icf	79923	29.6	34.9	4.3	4.0	-5.3	2.8	0.77
153	2011	icf	77844	30.3	35.2	4.0	3.8	-5.0	3.1	0.69
154	2012	icf	71131	30.5	35.0	4.2	4.1	-4.5	3.5	0.64
155	2013	icf	67079	30.9	35.1	4.5	3.9	-4.2	3.8	0.59
156	2014	icf	60968	31.3	34.9	4.8	3.9	-3.7	4.2	0.56
157	2015	icf	54000	31.4	34.7	4.9	3.8	-3.3	4.3	0.53
158	2016	icf	46610	31.6	35.1	4.6	3.4	-3.5	4.1	0.52
159	2017	icf	40096	31.3	34.9	4.3	3.3	-3.6	3.9	0.51
160	2018	icf	35129	31.2	34.8	4.1	3.4	-3.7	3.7	0.51
161	2019	icf	30118	30.5	34.1	3.7	3.6	-3.6	3.5	0.53
162	2020	icf	27990	29.8	33.1	3.2	3.8	-3.3	3.3	0.57
163	2021	icf	13486	29.3	31.3	3.1	4.4	-2.0	3.7	0.55
164	2022	icf	16	.	.	.	.	.	.	0.60
165	2010	fert	79923	28.8	34.0	4.3	4.1	-5.2	2.8	0.78
166	2011	fert	77844	29.6	34.3	4.0	3.9	-4.7	3.1	0.70
167	2012	fert	71131	29.9	34.1	4.2	4.2	-4.2	3.5	0.65
168	2013	fert	67079	30.3	34.2	4.4	4.0	-3.9	3.8	0.59
169	2014	fert	60968	30.6	34.0	4.7	4.0	-3.4	4.2	0.56
170	2015	fert	54000	30.8	33.8	4.8	3.9	-3.0	4.3	0.53
171	2016	fert	46610	31.0	34.2	4.5	3.4	-3.2	4.0	0.51
172	2017	fert	40096	30.7	34.0	4.2	3.4	-3.3	3.8	0.50
173	2018	fert	35129	30.6	34.0	4.0	3.4	-3.3	3.7	0.51
174	2019	fert	30118	30.0	33.2	3.7	3.7	-3.2	3.5	0.53
175	2020	fert	27990	29.5	32.3	3.2	3.9	-2.8	3.3	0.58
176	2021	fert	13486	29.1	30.6	3.1	4.4	-1.4	3.6	0.59
177	2022	fert	16	.	.	.	.	.	.	0.68

RDC reliability for SS and traditional for nongenotyped females with phenotype

Obs	diff	d_cr	d_nrr	d_icf	d_ifl	d_ais	d_hst	d_fert	p_cr	p_nrr	p_icf	p_ifl	p_ais	p_hst	p_fert
1	-10	.	.	17	6	2	1	6	.	.	0	0	0	0	0
2	-9	.	34	4575	1322	1149	86	1322	.	0	1	0	0	0	0
3	-8	1	6443	54679	37940	33795	6009	37940	0	1	9	5	4	2	6
4	-7	513	45129	120129	98900	88140	24264	98894	0	6	20	13	11	8	16
5	-6	15475	95421	115752	119780	122896	41934	117003	2	12	19	15	15	14	19
6	-5	62450	127461	74012	120510	131740	49931	86701	8	16	12	15	17	16	14
7	-4	105589	123572	48679	98063	101884	41629	55057	13	16	8	12	13	14	9
8	-3	97343	87295	38875	68818	68556	30560	40868	12	11	6	9	9	10	7
9	-2	77283	62705	33130	53518	55351	26451	37153	10	8	5	7	7	9	6
10	-1	65753	55336	29551	47509	49881	23223	34433	8	7	5	6	6	8	6
11	0	58624	50645	23770	38207	39788	17811	26774	7	6	4	5	5	6	4
12	1	54068	38726	15486	26625	26786	11508	18080	7	5	3	3	3	4	3
13	2	50008	26664	9004	16796	17245	7673	10916	6	3	1	2	2	3	2
14	3	44691	17488	6619	10916	11567	5603	7481	6	2	1	1	1	2	1
15	4	36810	12606	6270	8900	9965	4130	6748	5	2	1	1	1	1	1
16	5	28481	10230	6525	8805	9197	2877	6760	4	1	1	1	1	1	1
17	6	22010	7992	4631	7190	6849	2038	4914	3	1	1	1	1	1	1
18	7	17534	6358	2849	4567	4510	1746	3020	2	1	0	1	1	1	0
19	8	14504	4814	2046	4025	3389	1441	2298	2	1	0	1	0	0	0
20	9	12419	4432	2026	4195	2969	1228	2109	2	1	0	1	0	0	0
21	10	10150	4038	1729	3716	2391	1137	1695	1	1	0	0	0	0	0
22	11	7814	3126	1102	2470	1542	743	1127	1	0	0	0	0	0	0
23	12	5956	2147	774	1630	1101	430	832	1	0	0	0	0	0	0
24	13	4366	1501	656	1299	792	306	696	1	0	0	0	0	0	0
25	14	3559	1092	509	940	552	188	509	0	0	0	0	0	0	0
26	15	2795	652	337	565	388	88	344	0	0	0	0	0	0	0
27	16	2125	370	252	335	278	50	252	0	0	0	0	0	0	0
28	17	1540	246	140	227	156	25	173	0	0	0	0	0	0	0
29	18	1198	131	98	122	102	18	100	0	0	0	0	0	0	0
30	19	919	74	67	70	68	6	67	0	0	0	0	0	0	0
31	20	646	47	37	47	40	6	46	0	0	0	0	0	0	0
32	21	436	45	21	27	25	6	26	0	0	0	0	0	0	0
33	22	336	17	20	16	21	2	16	0	0	0	0	0	0	0
34	23	230	10	9	14	8	1	14	0	0	0	0	0	0	0
35	24	144	10	8	9	8	.	9	0	0	0	0	0	.	0
36	25	111	6	2	3	8	.	3	0	0	0	0	0	.	0
37	26	64	6	4	3	2	.	3	0	0	0	0	0	.	0

RDC reliability for SS and traditional for nongenotyped females with phenotype

Obs	diff	d_cr	d_nrr	d_icf	d_ifl	d_ais	d_hst	d_fert	p_cr	p_nrr	p_icf	p_ifl	p_ais	p_hst	p_fert
38	27	50	.	.	1	.	.	1	0	.	.	0	.	.	0
39	28	31	.	.	.	.	.	.	0	.	.	.	.	.	.
40	29	20	.	.	.	.	.	.	0	.	.	.	.	.	.
41	30	10	.	.	.	.	.	.	0	.	.	.	.	.	.
42	31	3	.	.	.	.	.	.	0	.	.	.	.	.	.
43	32	3	.	.	.	.	.	.	0	.	.	.	.	.	.
44	33	2	.	.	.	.	.	.	0	.	.	.	.	.	.
45	34	1	.	.	.	.	.	.	0	.	.	.	.	.	.

RDC reliability for SS and traditional 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	cr0	165	261	620	74.9	59.9	6.7	11.0	15.0	4.5	0.99
2	2011	cr0	168	323	692	76.0	62.0	7.7	13.0	14.0	5.4	0.99
3	2012	cr0	169	309	560	76.0	62.2	8.2	13.6	13.7	5.5	0.99
4	2013	cr0	122	436	725	77.6	65.1	9.6	15.9	12.6	6.4	1.00
5	2014	cr0	85	665	955	81.4	71.4	9.5	15.7	10.0	6.3	1.00
6	2015	cr0	71	735	898	83.5	74.8	8.4	14.3	8.7	6.0	0.99
7	2016	cr0	70	710	1010	82.1	71.8	9.0	14.9	10.3	6.6	0.97
8	2017	cr0	66	797	1103	81.6	70.2	9.9	17.0	11.4	7.2	1.00
9	2018	cr0	52	863	1218	80.5	65.9	10.4	17.7	14.6	7.5	0.99
10	2019	cr0	49	555	620	76.2	57.4	12.3	17.7	18.7	5.9	0.99
11	2020	cr0	23	100	121	60.5	37.3	8.1	10.1	23.2	2.7	0.98
12	2010	cr	165	279	658	84.5	68.2	5.3	9.9	16.3	4.8	0.99
13	2011	cr	168	347	739	85.4	70.2	6.1	11.7	15.1	5.7	0.99
14	2012	cr	169	332	598	85.4	70.3	6.3	12.2	15.1	6.1	0.99
15	2013	cr	122	467	768	86.5	72.6	7.0	14.1	13.9	7.1	0.99
16	2014	cr	85	711	1016	89.5	78.6	6.6	13.3	10.9	6.7	0.99
17	2015	cr	71	785	952	90.8	81.4	5.7	11.9	9.4	6.3	0.99
18	2016	cr	70	754	1067	88.9	78.2	6.4	12.8	10.7	6.6	0.98
19	2017	cr	66	843	1160	85.5	74.8	7.5	15.6	10.7	8.3	0.99
20	2018	cr	52	886	1248	78.4	65.6	8.2	18.0	12.8	10.0	0.99
21	2019	cr	49	556	622	65.7	48.1	5.7	15.0	17.6	10.1	0.91
22	2020	cr	23	100	121	59.9	33.3	2.7	6.2	26.6	4.0	0.87
23	2010	nrr0	165	247	588	62.7	56.4	8.9	11.1	6.2	2.5	0.99
24	2011	nrr0	168	303	649	63.9	58.5	10.4	13.3	5.4	3.3	0.99
25	2012	nrr0	169	293	530	64.1	58.9	11.0	13.9	5.2	3.1	1.00
26	2013	nrr0	122	412	683	66.4	61.9	13.1	16.5	4.5	3.6	1.00
27	2014	nrr0	85	628	906	71.2	68.3	13.3	16.6	2.9	3.5	1.00
28	2015	nrr0	71	698	858	74.0	72.0	12.3	15.2	2.0	3.1	1.00
29	2016	nrr0	70	674	963	72.0	69.4	13.0	15.7	2.7	4.6	0.97
30	2017	nrr0	66	758	1055	71.9	69.3	13.7	17.2	2.6	3.7	1.00
31	2018	nrr0	52	840	1192	71.0	68.0	14.0	17.1	3.1	3.3	1.00
32	2019	nrr0	50	637	692	68.5	63.9	15.0	18.6	4.6	3.7	1.00
33	2020	nrr0	35	191	259	55.1	46.9	11.6	14.7	8.3	3.4	0.99
34	2010	nrr	165	275	647	66.3	62.3	8.4	10.6	4.0	2.7	0.99
35	2011	nrr	168	341	724	67.6	64.4	9.6	12.6	3.2	3.4	0.99
36	2012	nrr	169	326	588	67.7	64.7	10.1	13.3	3.0	3.4	0.99
37	2013	nrr	122	459	756	69.7	67.5	11.9	15.4	2.2	3.8	1.00

RDC reliability for SS and traditional 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	2014	nrr	85	698	1001	74.2	73.7	11.7	14.9	0.4	3.6	0.99
39	2015	nrr	71	774	941	76.0	77.0	10.8	13.7	-1.0	3.3	0.99
40	2016	nrr	70	742	1053	73.4	73.8	11.4	14.3	-0.5	4.6	0.96
41	2017	nrr	66	833	1153	69.2	71.5	11.7	16.6	-2.4	5.4	0.99
42	2018	nrr	52	890	1258	61.2	64.1	10.6	18.3	-2.9	8.0	0.99
43	2019	nrr	50	643	700	47.7	45.5	7.4	15.7	2.3	9.1	0.95
44	2020	nrr	35	191	259	41.4	32.5	2.8	6.2	8.9	4.7	0.70
45	2010	icf	165	218	519	76.4	71.4	7.0	9.3	5.0	2.5	0.99
46	2011	icf	168	265	571	77.7	73.4	8.1	10.9	4.3	3.1	0.99
47	2012	icf	169	256	465	77.8	73.4	8.6	11.5	4.4	3.1	0.99
48	2013	icf	122	364	605	79.4	75.6	9.8	13.2	3.9	3.5	1.00
49	2014	icf	85	553	800	83.5	81.2	9.3	12.1	2.3	3.0	0.99
50	2015	icf	71	606	747	85.3	83.9	8.3	10.7	1.4	2.6	0.99
51	2016	icf	70	584	835	83.4	81.5	9.0	11.5	1.8	3.3	0.98
52	2017	icf	66	647	899	80.2	79.3	9.7	13.7	0.8	4.3	0.99
53	2018	icf	52	522	759	73.8	72.1	10.5	16.9	1.7	6.6	0.99
54	2019	icf	22	166	178	66.3	61.7	8.8	15.2	4.6	6.6	0.99
55	2010	ifl0	165	237	565	61.6	55.7	9.0	11.2	5.9	2.5	0.99
56	2011	ifl0	168	291	624	62.9	57.8	10.5	13.4	5.1	3.3	0.99
57	2012	ifl0	169	282	512	63.0	58.2	11.2	14.1	4.8	3.2	0.99
58	2013	ifl0	122	397	660	65.4	61.2	13.2	16.6	4.1	3.6	1.00
59	2014	ifl0	85	603	869	70.2	67.6	13.5	16.8	2.6	3.5	1.00
60	2015	ifl0	71	674	827	73.0	71.4	12.6	15.4	1.6	3.0	1.00
61	2016	ifl0	70	648	926	71.0	68.6	13.3	15.8	2.4	4.6	0.97
62	2017	ifl0	66	733	1021	70.9	68.6	14.0	17.4	2.3	3.6	1.00
63	2018	ifl0	52	814	1158	70.1	67.3	14.2	17.3	2.7	3.3	1.00
64	2019	ifl0	50	621	673	68.0	63.7	15.1	18.8	4.3	3.8	1.00
65	2020	ifl0	35	189	255	54.6	46.8	11.7	14.6	7.9	3.1	1.00
66	2010	ifl	165	272	641	73.3	68.6	7.6	9.8	4.7	2.5	0.99
67	2011	ifl	168	337	719	74.7	70.7	8.7	11.5	4.0	3.1	0.99
68	2012	ifl	169	323	584	74.9	70.8	9.2	12.0	4.1	3.1	0.99
69	2013	ifl	122	455	749	76.7	73.1	10.6	13.9	3.5	3.5	1.00
70	2014	ifl	85	692	992	81.1	79.0	10.2	13.1	2.0	3.1	0.99
71	2015	ifl	71	766	932	82.9	82.0	9.2	11.6	1.0	2.7	0.99
72	2016	ifl	70	735	1042	80.7	79.3	9.9	12.3	1.3	3.6	0.97
73	2017	ifl	66	826	1143	77.4	77.0	10.9	14.8	0.4	4.2	0.99
74	2018	ifl	52	875	1238	70.0	69.6	11.0	17.4	0.4	6.7	0.99

RDC reliability for SS and traditional 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	2019	ifl	50	628	681	54.9	48.3	8.7	16.6	6.6	8.5	0.96
76	2020	ifl	35	189	255	47.6	33.9	2.7	5.6	13.7	4.3	0.66
77	2010	ais0	165	243	578	68.0	63.1	8.2	10.5	5.0	2.6	0.99
78	2011	ais0	168	297	636	69.5	65.2	9.7	12.6	4.2	3.3	0.99
79	2012	ais0	169	287	520	69.5	65.5	10.2	13.1	4.1	3.1	0.99
80	2013	ais0	122	404	671	71.6	68.1	12.1	15.4	3.5	3.6	1.00
81	2014	ais0	85	617	890	76.2	74.4	12.0	14.9	1.8	3.2	0.99
82	2015	ais0	71	688	843	78.9	78.0	10.8	13.4	1.0	2.8	1.00
83	2016	ais0	70	662	946	77.1	75.4	11.4	13.8	1.7	3.9	0.97
84	2017	ais0	66	747	1038	76.8	74.8	12.4	15.5	2.1	3.4	1.00
85	2018	ais0	52	830	1177	76.0	73.1	12.6	15.5	2.9	3.0	1.00
86	2019	ais0	50	638	692	73.9	69.1	14.4	18.0	4.8	3.7	1.00
87	2020	ais0	35	191	259	60.7	51.7	12.0	15.3	8.9	3.6	0.99
88	2010	ais	165	273	645	72.0	67.6	7.7	9.9	4.4	2.5	0.99
89	2011	ais	168	339	721	73.3	69.7	9.0	11.8	3.6	3.2	0.99
90	2012	ais	169	325	586	73.5	69.9	9.4	12.3	3.6	3.1	0.99
91	2013	ais	122	457	752	75.4	72.3	10.9	14.2	3.2	3.5	1.00
92	2014	ais	85	695	997	79.7	78.2	10.5	13.3	1.5	3.1	0.99
93	2015	ais	71	771	937	81.6	81.3	9.7	12.0	0.3	2.8	0.99
94	2016	ais	70	740	1048	79.3	78.7	10.2	12.6	0.6	3.7	0.97
95	2017	ais	66	830	1147	75.3	76.7	10.6	14.8	-1.3	4.7	0.99
96	2018	ais	52	886	1250	67.8	70.6	9.7	16.9	-2.8	7.7	0.98
97	2019	ais	50	644	699	55.8	57.3	7.4	17.6	-1.4	11.3	0.91
98	2020	ais	35	191	259	48.5	40.9	3.4	10.8	7.6	8.2	0.84
99	2010	hst0	75	167	261	62.2	62.8	10.6	13.2	-0.6	4.6	0.95
100	2011	hst0	103	200	363	62.3	63.5	11.0	12.9	-1.2	3.3	0.97
101	2012	hst0	85	192	258	65.0	67.9	9.7	12.8	-2.9	4.8	0.94
102	2013	hst0	71	259	382	66.4	70.6	11.0	13.9	-4.2	5.2	0.94
103	2014	hst0	64	302	379	68.4	73.2	11.7	14.2	-4.7	4.4	0.96
104	2015	hst0	55	293	348	67.9	74.3	12.6	14.1	-6.4	3.9	0.96
105	2016	hst0	60	290	386	65.8	69.3	14.3	16.7	-3.5	6.2	0.93
106	2017	hst0	56	326	397	65.3	69.4	14.6	17.6	-4.1	4.9	0.97
107	2018	hst0	45	373	521	62.8	63.6	16.1	18.9	-0.8	3.8	0.99
108	2019	hst0	41	247	289	58.6	55.5	14.0	16.3	3.1	3.4	0.99
109	2020	hst0	22	85	89	47.8	42.0	8.9	9.6	5.8	1.8	0.98
110	2010	hst	75	202	308	63.9	66.8	9.8	12.4	-2.9	4.5	0.94
111	2011	hst	104	241	434	64.1	67.9	10.2	11.9	-3.8	3.5	0.96

RDC reliability for SS and traditional 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	2012	hst	85	233	310	66.7	72.1	9.0	12.3	-5.4	5.2	0.93
113	2013	hst	71	314	454	68.2	74.8	10.1	13.1	-6.6	5.8	0.91
114	2014	hst	65	363	451	69.7	76.9	10.8	13.6	-7.2	4.8	0.95
115	2015	hst	55	353	411	68.7	78.6	11.6	12.8	-9.9	4.9	0.92
116	2016	hst	62	331	447	64.7	72.5	12.9	15.8	-7.8	6.5	0.92
117	2017	hst	56	377	458	60.8	72.0	11.5	16.9	-11.3	7.1	0.95
118	2018	hst	45	407	563	53.2	62.9	10.1	19.0	-9.7	9.4	0.98
119	2019	hst	41	250	293	43.1	46.3	5.9	14.7	-3.2	9.1	0.96
120	2020	hst	22	85	89	37.1	34.5	3.3	5.7	2.7	3.7	0.80
121	2010	icf	165	218	519	75.7	70.8	7.2	9.5	5.0	2.6	0.99
122	2011	icf	168	265	571	77.2	72.9	8.3	11.2	4.3	3.2	0.99
123	2012	icf	169	256	465	77.3	72.9	8.7	11.7	4.4	3.1	0.99
124	2013	icf	122	364	605	78.9	75.1	10.1	13.3	3.8	3.5	1.00
125	2014	icf	85	553	800	83.2	80.9	9.5	12.3	2.2	3.1	0.99
126	2015	icf	71	606	747	84.9	83.5	8.6	11.0	1.3	2.7	0.99
127	2016	icf	70	584	835	82.8	81.1	9.2	11.7	1.7	3.4	0.97
128	2017	icf	66	647	899	79.5	78.7	10.0	14.1	0.8	4.4	0.99
129	2018	icf	52	522	759	72.0	71.2	10.3	17.1	0.8	7.0	0.99
130	2019	icf	22	166	178	64.1	61.0	8.0	15.2	3.0	7.5	0.98
131	2010	fert	165	218	519	73.3	68.6	7.6	9.8	4.7	2.5	0.99
132	2011	fert	168	265	571	74.7	70.7	8.7	11.5	4.0	3.1	0.99
133	2012	fert	169	256	465	74.9	70.8	9.2	12.0	4.1	3.1	0.99
134	2013	fert	122	364	605	76.7	73.1	10.6	13.9	3.5	3.5	1.00
135	2014	fert	85	553	800	81.1	79.0	10.2	13.1	2.0	3.1	0.99
136	2015	fert	71	606	747	82.9	82.0	9.2	11.6	1.0	2.7	0.99
137	2016	fert	70	584	835	80.7	79.3	9.9	12.3	1.3	3.6	0.97
138	2017	fert	66	647	899	77.4	77.0	10.9	14.8	0.4	4.2	0.99
139	2018	fert	52	522	759	70.0	69.6	11.0	17.4	0.4	6.7	0.99
140	2019	fert	22	166	178	62.4	62.6	8.0	14.0	-0.3	6.9	0.95

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

Obs	diff	d_cr	d_nrr	d_icf	d_ifl	d_ais	d_hst	d_fert	p_cr	p_nrr	p_icf	p_ifl	p_ais	p_hst	p_fert
1	-26	.	.	.	.	.	2	.	.	.	.	.	.	1	.
2	-25	.	.	.	.	1	1	.	.	.	.	.	0	0	.
3	-24	.	.	.	.	.	3	.	.	.	.	.	.	1	.
4	-23	.	.	.	.	.	5	.	.	.	.	.	.	2	.
5	-22	.	.	.	.	.	2	.	.	.	.	.	.	1	.
6	-21	.	.	.	.	1	4	.	.	.	.	.	0	1	.
7	-20	.	.	.	.	.	4	.	.	.	.	.	.	1	.
8	-19	.	.	.	.	1	10	.	.	.	.	.	0	4	.
9	-18	.	1	.	.	.	5	.	.	0	.	.	.	2	.
10	-17	.	1	.	.	4	3	.	.	0	.	.	1	1	.
11	-16	.	2	.	.	8	9	.	.	1	.	.	2	3	.
12	-15	.	3	.	.	.	11	.	.	1	.	.	.	4	.
13	-14	.	4	.	.	1	7	.	.	1	.	.	0	2	.
14	-13	.	4	.	.	2	15	.	.	1	.	.	1	5	.
15	-12	.	2	.	.	3	15	.	.	1	.	.	1	5	.
16	-11	.	3	.	1	5	11	1	.	1	.	0	1	4	0
17	-10	.	9	.	2	4	12	2	.	3	.	1	1	4	1
18	-9	.	6	.	3	7	16	3	.	2	.	1	2	6	1
19	-8	.	8	2	6	9	9	6	.	2	1	2	3	3	2
20	-7	.	9	2	5	4	12	5	.	3	1	1	1	4	2
21	-6	.	10	6	2	6	12	2	.	3	2	1	2	4	1
22	-5	.	11	9	13	7	15	13	.	3	3	4	2	5	5
23	-4	2	35	12	13	13	11	12	1	10	4	4	4	4	4
24	-3	5	30	12	11	23	9	11	2	9	4	3	7	3	4
25	-2	3	16	17	24	35	10	24	1	5	6	7	10	4	9
26	-1	6	12	45	49	35	10	49	2	3	16	14	10	4	17
27	0	8	17	31	25	23	9	25	2	5	11	7	7	3	9
28	1	19	17	16	15	15	8	15	6	5	6	4	4	3	5
29	2	15	21	20	17	20	8	15	5	6	7	5	6	3	5
30	3	17	19	18	23	24	10	22	5	6	6	7	7	4	8
31	4	8	19	21	25	12	11	23	2	6	7	7	3	4	8
32	5	8	13	18	15	13	3	14	2	4	6	4	4	1	5
33	6	14	10	16	10	11	4	10	4	3	6	3	3	1	4
34	7	5	12	5	6	9	1	5	2	3	2	2	3	0	2
35	8	12	6	8	10	4	2	10	4	2	3	3	1	1	4
36	9	9	10	5	9	6	.	6	3	3	2	3	2	.	2
37	10	12	8	5	5	8	.	3	4	2	2	1	2	.	1

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

Obs	diff	d_cr	d_nrr	d_icf	d_ifl	d_ais	d_hst	d_fert	p_cr	p_nrr	p_icf	p_ifl	p_ais	p_hst	p_fert
38	11	10	10	4	5	14	.	1	3	3	1	1	4	.	0
39	12	5	4	2	8	2	.	2	2	1	1	2	1	.	1
40	13	10	6	2	3	5	1	1	3	2	1	1	1	0	0
41	14	11	4	2	8	4	.	.	3	1	1	2	1	.	.
42	15	7	.	2	12	2	.	.	2	.	1	3	1	.	.
43	16	11	1	.	5	2	.	.	3	0	.	1	1	.	.
44	17	14	.	1	7	.	.	.	4	.	0	2	.	.	.
45	18	16	.	.	4	.	.	.	5	.	.	1	.	.	.
46	19	22	.	.	1	.	.	1	7	.	.	0	.	.	0
47	20	8	.	.	2	1	.	.	2	.	.	1	0	.	.
48	21	5	.	.	.	.	.	.	2	.	.	.	.	.	.
49	22	12	.	.	.	.	.	.	4	.	.	.	.	.	.
50	23	10	.	.	.	.	.	.	3	.	.	.	.	.	.
51	24	8	.	.	.	.	.	.	2	.	.	.	.	.	.
52	25	10	1	.	.	.	.	.	3	0	.	.	.	.	.
53	26	6	.	.	.	.	.	.	2	.	.	.	.	.	.
54	27	6	.	.	.	.	.	.	2	.	.	.	.	.	.
55	28	6	.	.	.	.	1	.	2	.	.	.	.	0	.
56	29	4	.	.	.	.	.	.	1	.	.	.	.	.	.
57	30	2	.	.	.	.	.	.	1	.	.	.	.	.	.
58	31	1	.	.	.	.	.	.	0	.	.	.	.	.	.
59	32	2	.	.	.	.	.	.	1	.	.	.	.	.	.
60	33	2	.	.	.	.	.	.	1	.	.	.	.	.	.

RDC reliability for SS and twostep 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	fert	8046	51.4	70.4	2.8	2.1	-19.0	1.4	0.88
2	2016	fert	11085	51.4	70.3	2.4	1.9	-18.9	1.2	0.87
3	2017	fert	12896	51.1	69.9	2.2	1.8	-18.8	1.1	0.86
4	2018	fert	14549	51.0	69.9	2.3	1.8	-18.9	1.1	0.88
5	2019	fert	14755	50.1	69.4	2.4	1.9	-19.3	1.1	0.88
6	2020	fert	16428	49.0	68.9	2.4	2.0	-19.9	1.1	0.89
7	2021	fert	9989	46.9	67.3	2.8	2.5	-20.5	1.1	0.93
8	2022	fert	10	45.5	65.6	5.0	3.7	-20.1	1.8	0.96

RDC reliability for SS and twostep for genotyped females with phenotype

Obs	diff	d_fert	p_fert
1	-30	2	0
2	-29	4	0
3	-28	9	0
4	-27	8	0
5	-26	13	0
6	-25	21	0
7	-24	93	0
8	-23	703	1
9	-22	3602	4
10	-21	11362	13
11	-20	21920	25
12	-19	26389	30
13	-18	17983	20
14	-17	4828	6
15	-16	668	1
16	-15	113	0
17	-14	29	0
18	-13	4	0
19	-12	2	0
20	-11	4	0
21	-8	1	0

RDC reliability for SS and twostep for nordic AI bulls without offspring

Obs	BYR	name	no	mean_noff	std_noff	mean_ss	mean_e	std_ss	std_e	mean_dif	std_dif	corr_SS
1	2019	fert	37	.	.	47.9	67.7	2.9	1.9	-19.8	1.4	0.93
2	2020	fert	74	.	.	47.1	67.3	2.9	2.1	-20.2	1.4	0.89
3	2021	fert	72	.	.	42.9	64.3	2.9	2.3	-21.3	1.0	0.95
4	2022	fert	73	.	.	38.5	61.5	1.6	1.4	-23.0	1.0	0.79
5	2023	fert	50	.	.	37.1	60.5	1.9	1.5	-23.4	0.7	0.94
6	2024	fert	2	.	.	35.5	60.0	3.5	1.6	-24.5	2.0	1.00

RDC reliability for SS and twostep for nordic AI bulls without offspring

Obs	diff	d_fert	p_fert
1	-28	1	0
2	-26	2	1
3	-25	6	2
4	-24	28	9
5	-23	78	25
6	-22	48	16
7	-21	58	19
8	-20	58	19
9	-19	17	6
10	-18	8	3
11	-17	3	1
12	-16	1	0

RDC sum sta for SS and prev SS breeding value for genotyped females without phenotype, by birth year

Obs	BYR	name	no	mean_ss	mean_oss	std_ss	std_oss	mean_dif	std_dif	corr_SS
1	2019	cr0	4167	100.1	100.1	9.2	9.2	0.0	0.7	1.00
2	2020	cr0	4099	101.8	101.9	9.3	9.2	-0.1	0.8	1.00
3	2021	cr0	3845	100.7	100.7	8.4	8.2	0.0	0.9	0.99
4	2022	cr0	9879	102.4	102.9	7.9	7.7	-0.5	1.6	0.98
5	2023	cr0	22228	103.1	103.6	6.9	6.7	-0.5	1.3	0.98
6	2024	cr0	4979	103.8	104.0	6.7	6.5	-0.2	1.1	0.99
7	2026	cr0	2	.	.	.	.	.	.	.
8	2019	cr1	6928	98.5	98.6	9.0	8.9	-0.1	0.9	1.00
9	2020	cr1	7356	102.7	102.8	9.4	9.3	-0.1	1.1	0.99
10	2021	cr1	13130	101.9	102.0	8.5	8.2	-0.1	1.3	0.99
11	2022	cr1	24783	104.2	104.5	8.0	7.8	-0.3	1.4	0.98
12	2023	cr1	22233	105.3	105.6	7.2	7.1	-0.3	1.3	0.98
13	2024	cr1	4979	106.1	106.1	7.0	6.8	-0.1	1.2	0.99
14	2026	cr1	2	.	.	.	.	.	.	1.00
15	2019	cr2	10191	98.3	98.3	8.6	8.6	-0.1	1.0	0.99
16	2020	cr2	15110	102.6	102.7	8.9	8.8	-0.1	1.2	0.99
17	2021	cr2	23966	102.1	102.3	8.1	7.8	-0.2	1.4	0.99
18	2022	cr2	24830	104.0	104.2	7.7	7.5	-0.2	1.4	0.98
19	2023	cr2	22233	105.1	105.4	7.0	6.9	-0.2	1.3	0.98
20	2024	cr2	4979	106.0	106.0	6.8	6.6	0.0	1.2	0.98
21	2026	cr2	2	.	.	.	.	.	.	1.00
22	2019	cr3	16840	98.9	98.9	8.4	8.4	0.0	1.1	0.99
23	2020	cr3	23650	102.9	103.0	8.4	8.3	-0.1	1.3	0.99
24	2021	cr3	24018	102.1	102.2	7.8	7.5	-0.1	1.4	0.98
25	2022	cr3	24830	103.9	104.0	7.4	7.2	-0.1	1.3	0.98
26	2023	cr3	22233	105.0	105.0	6.9	6.7	-0.1	1.3	0.98
27	2024	cr3	4979	106.0	105.8	6.6	6.4	0.2	1.2	0.98
28	2026	cr3	2	.	.	.	.	.	.	1.00
29	2019	cr	3287	98.8	98.9	8.7	8.7	0.0	1.0	0.99
30	2020	cr	3357	102.2	102.2	9.0	8.9	-0.1	1.2	0.99
31	2021	cr	3461	101.6	101.7	8.3	8.0	-0.1	1.4	0.99
32	2022	cr	9871	104.0	104.2	7.6	7.5	-0.2	1.4	0.98
33	2023	cr	22228	105.3	105.5	7.2	7.0	-0.2	1.3	0.98
34	2024	cr	4979	106.2	106.1	6.9	6.7	0.1	1.2	0.99
35	2026	cr	2	.	.	.	.	.	.	1.00
36	2019	nrr0	4789	100.4	100.4	9.1	9.1	0.0	0.9	0.99
37	2020	nrr0	4807	101.3	101.4	9.2	9.1	-0.1	1.0	0.99

RDC sum sta for SS and prev SS breeding value for genotyped females without phenotype, by birth year

Obs	BYR	name	no	mean_ss	mean_oss	std_ss	std_oss	mean_dif	std_dif	corr_SS
38	2021	nrr0	4631	99.8	99.9	8.4	8.3	-0.1	1.0	0.99
39	2022	nrr0	6003	100.2	100.3	8.4	8.0	-0.1	2.1	0.97
40	2023	nrr0	20760	101.6	101.2	7.7	7.2	0.4	2.3	0.95
41	2024	nrr0	4979	101.6	101.4	7.3	7.1	0.2	1.6	0.98
42	2026	nrr0	2	.	.	.	.	.	.	1.00
43	2019	nrr1	7365	99.4	99.4	8.8	8.7	0.0	1.0	0.99
44	2020	nrr1	7849	102.0	102.1	8.7	8.6	-0.1	1.1	0.99
45	2021	nrr1	10495	101.4	101.2	8.2	8.0	0.2	1.6	0.98
46	2022	nrr1	23783	102.4	102.4	7.4	7.2	0.0	1.7	0.97
47	2023	nrr1	22233	103.6	103.4	7.0	6.9	0.3	1.6	0.97
48	2024	nrr1	4979	103.8	103.6	6.7	6.6	0.2	1.5	0.97
49	2026	nrr1	2	.	.	.	.	.	.	.
50	2019	nrr2	10459	99.1	99.1	9.4	9.4	0.0	1.1	0.99
51	2020	nrr2	12966	101.8	101.8	9.3	9.3	0.0	1.6	0.98
52	2021	nrr2	23190	101.3	101.2	8.3	8.3	0.2	1.8	0.98
53	2022	nrr2	24830	102.9	102.8	7.6	7.7	0.0	1.6	0.98
54	2023	nrr2	22233	104.1	103.9	7.3	7.3	0.2	1.5	0.98
55	2024	nrr2	4979	104.1	104.1	7.0	7.0	0.1	1.5	0.98
56	2026	nrr2	2	.	.	.	.	.	.	1.00
57	2019	nrr3	15493	99.1	99.3	9.1	9.3	-0.2	1.8	0.98
58	2020	nrr3	23080	102.0	101.9	8.9	8.7	0.1	2.2	0.97
59	2021	nrr3	24018	101.2	101.3	8.2	8.2	-0.1	1.8	0.98
60	2022	nrr3	24830	102.5	102.5	7.7	7.7	0.0	1.9	0.97
61	2023	nrr3	22233	103.7	103.5	7.3	7.3	0.2	1.6	0.98
62	2024	nrr3	4979	103.9	104.2	7.0	7.0	-0.3	1.8	0.97
63	2026	nrr3	2	.	.	.	.	.	.	1.00
64	2019	nrr	3506	99.4	99.5	9.0	9.0	0.0	1.2	0.99
65	2020	nrr	3579	101.7	101.7	8.7	8.6	0.0	1.5	0.98
66	2021	nrr	3736	101.0	100.9	8.2	8.2	0.1	1.6	0.98
67	2022	nrr	5925	102.3	102.3	7.3	7.3	0.0	1.6	0.98
68	2023	nrr	20760	103.9	103.7	7.1	7.0	0.2	1.5	0.98
69	2024	nrr	4979	104.0	104.0	6.8	6.8	0.0	1.5	0.97
70	2026	nrr	2	.	.	.	.	.	.	1.00
71	2019	icf1	7234	98.6	98.7	7.5	7.5	-0.1	0.8	0.99
72	2020	icf1	7693	101.0	101.1	7.2	7.2	0.0	0.9	0.99
73	2021	icf1	10429	100.9	100.8	7.2	7.1	0.1	1.4	0.98
74	2022	icf1	24133	101.7	102.0	7.0	7.0	-0.2	1.4	0.98

RDC sum sta for SS and prev SS breeding value for genotyped females without phenotype, by birth year

Obs	BYR	name	no	mean_ss	mean_oss	std_ss	std_oss	mean_dif	std_dif	corr_SS
75	2023	icf1	22233	102.3	102.5	7.0	7.0	-0.2	1.3	0.98
76	2024	icf1	4979	102.4	102.7	6.8	6.7	-0.3	1.3	0.98
77	2026	icf1	2	.	.	.	.	.	.	1.00
78	2019	icf2	10335	98.3	98.5	8.9	9.0	-0.2	0.9	0.99
79	2020	icf2	13013	100.8	100.6	8.0	8.1	0.2	1.3	0.99
80	2021	icf2	23397	100.9	100.9	7.9	7.9	0.0	1.5	0.98
81	2022	icf2	24830	101.7	101.8	7.7	7.8	-0.1	1.5	0.98
82	2023	icf2	22233	101.8	101.9	7.7	7.8	-0.1	1.4	0.98
83	2024	icf2	4979	101.9	102.2	7.4	7.5	-0.3	1.4	0.98
84	2026	icf2	2	.	.	.	.	.	.	1.00
85	2019	icf3	15511	98.6	98.7	9.0	9.0	-0.2	1.2	0.99
86	2020	icf3	23248	101.1	101.0	8.1	8.2	0.1	1.3	0.99
87	2021	icf3	24018	101.2	101.3	7.9	8.1	-0.1	1.5	0.98
88	2022	icf3	24830	101.7	101.8	7.9	8.1	-0.2	1.4	0.98
89	2023	icf3	22233	102.3	102.5	7.8	8.0	-0.2	1.3	0.99
90	2024	icf3	4979	102.5	102.5	7.5	7.6	-0.1	1.4	0.98
91	2026	icf3	2	.	.	.	.	.	.	1.00
92	2019	icf	6599	98.5	98.7	8.4	8.4	-0.1	0.9	0.99
93	2020	icf	7176	100.8	100.8	7.7	7.8	0.1	1.1	0.99
94	2021	icf	10402	100.9	100.9	7.6	7.7	0.0	1.4	0.98
95	2022	icf	24133	101.7	101.9	7.4	7.5	-0.2	1.4	0.98
96	2023	icf	22233	102.2	102.3	7.4	7.5	-0.2	1.3	0.99
97	2024	icf	4979	102.3	102.5	7.1	7.2	-0.2	1.3	0.98
98	2026	icf	2	.	.	.	.	.	.	1.00
99	2019	ifl0	5278	100.3	100.2	9.1	9.2	0.0	0.9	1.00
100	2020	ifl0	5334	101.4	101.4	9.1	9.0	-0.1	1.0	0.99
101	2021	ifl0	5138	100.2	100.3	8.8	8.6	-0.1	1.0	0.99
102	2022	ifl0	6325	100.8	100.9	8.6	8.2	-0.2	2.0	0.97
103	2023	ifl0	20762	101.9	101.7	7.5	7.0	0.2	2.0	0.96
104	2024	ifl0	4979	102.6	102.6	7.4	7.1	0.0	1.4	0.98
105	2026	ifl0	2	.	.	.	.	.	.	.
106	2019	ifl1	7302	98.5	98.5	8.8	8.7	0.0	1.0	0.99
107	2020	ifl1	7744	102.3	102.4	8.8	8.7	-0.1	1.2	0.99
108	2021	ifl1	10361	101.5	101.3	8.2	8.1	0.2	1.5	0.98
109	2022	ifl1	23765	103.2	103.4	7.5	7.5	-0.2	1.7	0.97
110	2023	ifl1	22233	104.2	104.1	7.2	7.1	0.1	1.5	0.98
111	2024	ifl1	4979	104.7	104.7	7.1	7.0	0.0	1.5	0.98

RDC sum sta for SS and prev SS breeding value for genotyped females without phenotype, by birth year

Obs	BYR	name	no	mean_ss	mean_oss	std_ss	std_oss	mean_dif	std_dif	corr_SS
112	2026	ifl1	2	.	.	.	.	.	.	1.00
113	2019	ifl2	10378	98.4	98.5	8.6	8.6	-0.1	1.1	0.99
114	2020	ifl2	12869	101.6	101.7	8.3	8.4	0.0	1.3	0.99
115	2021	ifl2	23176	101.6	101.5	7.8	7.7	0.1	1.5	0.98
116	2022	ifl2	24830	103.1	103.3	7.2	7.3	-0.1	1.6	0.98
117	2023	ifl2	22233	103.9	103.9	6.9	6.8	0.0	1.3	0.98
118	2024	ifl2	4979	104.6	104.7	6.8	6.8	-0.1	1.4	0.98
119	2026	ifl2	2	.	.	.	.	.	.	1.00
120	2019	ifl3	15383	98.7	98.8	8.6	8.5	-0.1	1.3	0.99
121	2020	ifl3	23071	102.0	101.9	8.0	8.0	0.0	1.6	0.98
122	2021	ifl3	24018	101.6	101.6	7.6	7.6	0.0	1.5	0.98
123	2022	ifl3	24830	102.9	103.1	7.1	7.3	-0.1	1.7	0.97
124	2023	ifl3	22233	103.7	103.6	6.8	6.8	0.0	1.4	0.98
125	2024	ifl3	4979	104.5	104.7	6.7	6.8	-0.2	1.4	0.98
126	2026	ifl3	2	.	.	.	.	.	.	1.00
127	2019	ifl	3619	98.8	98.8	8.6	8.6	-0.1	1.2	0.99
128	2020	ifl	3680	101.6	101.6	8.5	8.6	0.0	1.4	0.99
129	2021	ifl	4007	101.3	101.2	8.0	8.0	0.1	1.5	0.98
130	2022	ifl	6247	102.9	103.0	7.3	7.4	-0.1	1.6	0.98
131	2023	ifl	20762	104.0	104.0	7.0	7.0	0.0	1.4	0.98
132	2024	ifl	4979	104.7	104.8	6.9	7.0	-0.1	1.4	0.98
133	2026	ifl	2	.	.	.	.	.	.	1.00
134	2019	ais0	5044	100.6	100.5	9.2	9.2	0.1	0.9	1.00
135	2020	ais0	5040	101.3	101.4	9.1	9.1	-0.1	1.0	0.99
136	2021	ais0	4863	99.8	100.0	8.4	8.3	-0.2	1.0	0.99
137	2022	ais0	6035	99.8	99.9	8.3	8.0	-0.1	1.9	0.97
138	2023	ais0	20760	101.5	101.3	7.7	7.3	0.2	2.0	0.97
139	2024	ais0	4979	101.6	101.5	7.5	7.2	0.0	1.4	0.98
140	2026	ais0	2	.	.	.	.	.	.	1.00
141	2019	ais1	7437	98.7	98.6	9.1	9.0	0.0	0.9	0.99
142	2020	ais1	7914	102.2	102.3	9.5	9.5	-0.1	1.0	0.99
143	2021	ais1	10676	100.7	100.9	8.6	8.3	-0.2	1.5	0.98
144	2022	ais1	24175	102.2	102.4	8.0	7.7	-0.1	1.7	0.98
145	2023	ais1	22233	103.4	103.4	7.5	7.3	0.1	1.5	0.98
146	2024	ais1	4979	103.9	103.8	7.2	7.0	0.0	1.4	0.98
147	2026	ais1	2	.	.	.	.	.	.	1.00
148	2019	ais2	10500	98.9	98.9	8.5	8.6	0.0	1.0	0.99

RDC sum sta for SS and prev SS breeding value for genotyped females without phenotype, by birth year

Obs	BYR	name	no	mean_ss	mean_oss	std_ss	std_oss	mean_dif	std_dif	corr_SS
149	2020	ais2	13185	101.2	101.3	8.7	8.7	-0.1	1.3	0.99
150	2021	ais2	23429	100.8	101.0	7.7	7.5	-0.2	1.5	0.98
151	2022	ais2	24830	101.8	101.9	7.4	7.3	-0.1	1.5	0.98
152	2023	ais2	22233	103.0	102.9	7.0	6.9	0.1	1.5	0.98
153	2024	ais2	4979	103.7	103.6	6.7	6.6	0.0	1.3	0.98
154	2026	ais2	2	.	.	.	.	.	.	1.00
155	2019	ais3	15676	99.3	99.3	8.6	8.7	0.0	1.5	0.98
156	2020	ais3	23273	101.4	101.3	8.2	8.1	0.0	1.7	0.98
157	2021	ais3	24018	100.7	100.9	7.5	7.3	-0.2	1.5	0.98
158	2022	ais3	24830	101.3	101.3	7.3	7.2	-0.1	1.6	0.98
159	2023	ais3	22233	102.5	102.3	7.0	6.8	0.2	1.6	0.97
160	2024	ais3	4979	103.3	103.2	6.7	6.6	0.1	1.5	0.97
161	2026	ais3	2	.	.	.	.	.	.	1.00
162	2019	ais	3562	99.4	99.4	8.7	8.7	0.0	1.1	0.99
163	2020	ais	3645	101.5	101.6	8.7	8.6	-0.1	1.3	0.99
164	2021	ais	3857	100.7	100.9	7.9	7.7	-0.2	1.4	0.98
165	2022	ais	5975	101.6	101.8	7.4	7.2	-0.1	1.6	0.98
166	2023	ais	20760	103.2	103.1	7.1	6.9	0.1	1.5	0.98
167	2024	ais	4979	103.8	103.8	6.8	6.7	0.0	1.4	0.98
168	2026	ais	2	.	.	.	.	.	.	1.00
169	2019	hst0	16070	100.8	101.0	7.6	7.7	-0.2	1.2	0.99
170	2020	hst0	17241	101.1	100.9	7.8	7.8	0.2	1.3	0.99
171	2021	hst0	17426	101.9	102.0	7.6	7.8	-0.1	1.5	0.98
172	2022	hst0	18460	102.1	102.3	8.3	8.3	-0.2	2.3	0.96
173	2023	hst0	21985	102.2	102.4	7.4	7.3	-0.2	1.9	0.97
174	2024	hst0	4979	102.9	103.2	7.3	7.3	-0.3	1.5	0.98
175	2026	hst0	2	.	.	.	.	.	.	1.00
176	2019	hst1	16909	99.7	99.8	7.5	7.6	-0.1	1.2	0.99
177	2020	hst1	18403	100.9	100.8	7.9	7.9	0.1	1.2	0.99
178	2021	hst1	19603	102.1	101.8	7.6	7.5	0.3	2.2	0.96
179	2022	hst1	24728	102.0	102.0	7.6	7.4	0.0	1.9	0.97
180	2023	hst1	22233	102.3	102.4	7.0	7.0	-0.1	1.5	0.98
181	2024	hst1	4979	103.2	103.6	7.1	7.1	-0.4	1.5	0.98
182	2026	hst1	2	.	.	.	.	.	.	1.00
183	2019	hst2	18130	99.3	99.6	8.6	8.6	-0.3	1.3	0.99
184	2020	hst2	20657	100.0	99.7	8.5	8.5	0.3	1.8	0.98
185	2021	hst2	23904	101.0	101.2	8.1	7.9	-0.2	1.9	0.97

RDC sum sta for SS and prev SS breeding value for genotyped females without phenotype, by birth year

Obs	BYR	name	no	mean_ss	mean_oss	std_ss	std_oss	mean_dif	std_dif	corr_SS
186	2022	hst2	24830	100.8	100.8	7.9	7.9	0.0	1.8	0.97
187	2023	hst2	22233	100.8	101.0	7.7	7.7	-0.2	1.7	0.98
188	2024	hst2	4979	101.8	102.1	7.5	7.4	-0.3	1.5	0.98
189	2026	hst2	2	.	.	.	.	.	.	1.00
190	2019	hst3	19864	99.5	100.1	8.8	8.7	-0.6	2.0	0.97
191	2020	hst3	23649	99.9	99.4	8.3	8.5	0.6	2.1	0.97
192	2021	hst3	24018	101.1	101.4	8.1	8.1	-0.3	1.9	0.97
193	2022	hst3	24830	100.9	100.9	7.9	8.0	0.1	1.9	0.97
194	2023	hst3	22233	101.9	101.9	7.8	7.9	0.0	1.9	0.97
195	2024	hst3	4979	102.8	102.8	7.6	7.6	-0.1	1.7	0.97
196	2026	hst3	2	.	.	.	.	.	.	1.00
197	2019	hst	15545	99.4	99.7	7.9	7.9	-0.3	1.4	0.99
198	2020	hst	16700	100.1	99.8	7.8	7.9	0.4	1.5	0.98
199	2021	hst	16993	101.3	101.4	7.6	7.5	-0.1	1.7	0.97
200	2022	hst	18450	101.1	101.1	7.4	7.5	0.0	1.7	0.97
201	2023	hst	21985	101.8	101.9	7.2	7.2	-0.1	1.5	0.98
202	2024	hst	4979	102.7	103.0	7.1	7.1	-0.3	1.4	0.98
203	2026	hst	2	.	.	.	.	.	.	1.00
204	2019	fert	6599	98.6	98.6	9.0	8.9	-0.1	1.0	0.99
205	2020	fert	7176	101.7	101.8	8.8	8.8	0.0	1.2	0.99
206	2021	fert	10402	101.2	101.2	8.0	8.0	0.0	1.3	0.99
207	2022	fert	24133	102.8	103.0	7.5	7.6	-0.2	1.6	0.98
208	2023	fert	22233	103.8	103.8	7.1	7.0	0.1	1.4	0.98
209	2024	fert	4979	104.6	104.7	7.0	7.0	-0.1	1.3	0.98
210	2026	fert	2	.	.	.	.	.	.	1.00

RDC sum sta for SS and prev SS breeding value for genotyped females without phenotype, by birth year

Obs	diff	d_cr	d_nrr	d_icf	d_ifl	d_ais	d_hst	d_fert
1	-13	.	.	.	.	.	1	.
2	-12	.	.	.	.	.	1	.
3	-11	.	.	1	.	.	.	.
4	-10	.	.	.	.	.	2	.
5	-8	.	.	3	.	.	1	.
6	-7	.	.	1	.	1	2	.
7	-6	1	8	8	8	13	7	7
8	-5	11	61	67	57	104	74	76
9	-4	179	377	353	333	358	716	554
10	-3	1440	1348	1853	1294	1121	3913	2253
11	-2	5105	3810	7823	4166	3909	11953	7578
12	-1	11074	8297	17991	9391	9167	20723	17064
13	0	14987	11506	24124	12718	12390	23898	22027
14	1	10342	9806	16443	9610	9561	18063	16382
15	2	3371	5223	5431	4382	4548	9991	7377
16	3	622	1656	1197	1144	1303	3993	1895
17	4	47	355	202	172	272	1104	284
18	5	3	37	18	16	29	181	21
19	6	1	1	4	3	2	27	.
20	7	.	.	3	1	1	1	4
21	8	.	1	.	.	.	1	.
22	9	1	.	1	.	.	.	1
23	10	.	1	1	.	1	.	1
24	11	1	.	.	1	.	.	.
25	12	.	.	.	.	.	1	.
26	19	.	.	.	.	.	1	.

RDC sum sta for SS and prev SS breeding value for genotyped females without phenotype, by birth year

Obs	diff	p_cr	p_nrr	p_icf	p_ifl	p_ais	p_hst	p_fert
1	-13	.	.	.	.	.	0	.
2	-12	.	.	.	.	.	0	.
3	-11	.	.	0	.	.	.	.
4	-10	.	.	.	.	.	0	.
5	-8	.	.	0	.	.	0	.
6	-7	.	.	0	.	0	0	.
7	-6	0	0	0	0	0	0	0
8	-5	0	0	0	0	0	0	0
9	-4	0	1	0	1	1	1	1
10	-3	3	3	2	3	3	4	3
11	-2	11	9	10	10	9	13	10
12	-1	23	20	24	22	21	22	23
13	0	32	27	32	29	29	25	29
14	1	22	23	22	22	22	19	22
15	2	7	12	7	10	11	11	10
16	3	1	4	2	3	3	4	3
17	4	0	1	0	0	1	1	0
18	5	0	0	0	0	0	0	0
19	6	0	0	0	0	0	0	.
20	7	.	.	0	0	0	0	0
21	8	.	0	.	.	.	0	.
22	9	0	.	0	.	.	.	0
23	10	.	0	0	.	0	.	0
24	11	0	.	.	0	.	.	.
25	12	.	.	.	.	.	0	.
26	19	.	.	.	.	.	0	.

RDC sum sta for SS and previous breeding value for genotyped females with phenotype, by birth year

Obs	BYR	name	no	mean_ss	mean_oss	std_ss	std_oss	mean_dif	std_dif	corr_SS
1	2015	cr0	9426	97.4	97.1	7.9	7.9	0.3	0.8	0.99
2	2016	cr0	13119	97.5	97.2	8.2	8.2	0.3	0.8	1.00
3	2017	cr0	15292	98.8	98.6	8.1	8.1	0.2	0.7	1.00
4	2018	cr0	17028	99.4	99.2	7.5	7.5	0.1	0.8	0.99
5	2019	cr0	17216	100.0	100.0	9.0	9.0	0.0	0.7	1.00
6	2020	cr0	19642	102.8	102.9	9.2	9.1	-0.1	0.8	1.00
7	2021	cr0	20051	101.3	101.3	8.4	8.2	-0.1	0.9	0.99
8	2022	cr0	9465	102.9	103.1	8.9	8.6	-0.2	1.4	0.99
9	2015	cr1	7877	95.2	95.1	8.0	7.9	0.1	0.9	0.99
10	2016	cr1	10896	95.6	95.5	8.2	8.2	0.1	0.9	0.99
11	2017	cr1	12603	96.3	96.3	8.3	8.2	0.0	0.9	0.99
12	2018	cr1	14278	98.7	98.7	8.1	8.1	0.0	0.9	0.99
13	2019	cr1	14452	99.5	99.6	8.9	8.9	0.0	0.9	1.00
14	2020	cr1	16264	104.0	104.1	9.2	9.2	-0.2	1.1	0.99
15	2021	cr1	6966	103.3	103.5	8.5	8.3	-0.2	1.3	0.99
16	2022	cr1	1	.	.	.	.	.	.	.
17	2015	cr2	6201	95.7	95.6	7.8	7.7	0.0	1.0	0.99
18	2016	cr2	8661	95.9	95.9	8.1	8.0	0.0	0.9	0.99
19	2017	cr2	9986	96.5	96.5	8.2	8.0	0.0	0.9	0.99
20	2018	cr2	11301	98.7	98.7	7.9	7.8	-0.1	0.9	0.99
21	2019	cr2	11033	99.9	99.9	8.6	8.6	0.0	1.0	0.99
22	2020	cr2	5390	104.0	104.1	8.9	8.9	-0.1	1.1	0.99
23	2021	cr2	1	.	.	.	.	.	.	.
24	2015	cr3	4222	96.4	96.3	7.9	7.7	0.0	1.0	0.99
25	2016	cr3	5830	96.6	96.7	8.0	7.8	0.0	0.9	0.99
26	2017	cr3	6691	97.1	97.1	8.0	7.9	0.0	0.9	0.99
27	2018	cr3	7363	99.2	99.2	7.7	7.6	-0.1	1.0	0.99
28	2019	cr3	2699	100.5	100.5	8.1	8.0	0.0	1.2	0.99
29	2020	cr3	6	.	.	.	.	.	.	0.98
30	2015	cr	9788	95.1	95.0	8.1	8.0	0.0	1.0	0.99
31	2016	cr	13628	95.5	95.5	8.3	8.2	0.0	0.9	0.99
32	2017	cr	15927	96.0	96.0	8.4	8.2	0.0	0.9	0.99
33	2018	cr	17802	98.3	98.3	8.2	8.1	-0.1	1.0	0.99
34	2019	cr	18090	99.3	99.3	8.8	8.8	0.0	1.0	0.99
35	2020	cr	20306	103.4	103.6	9.0	8.9	-0.1	1.2	0.99
36	2021	cr	20293	102.4	102.5	8.2	7.9	-0.1	1.4	0.98
37	2022	cr	9467	104.2	104.2	8.0	7.8	-0.1	1.4	0.98

RDC sum sta for SS and previous breeding value for genotyped females with phenotype, by birth year

Obs	BYR	name	no	mean_ss	mean_oss	std_ss	std_oss	mean_dif	std_dif	corr_SS
38	2015	nrr0	9105	99.9	99.7	8.1	8.1	0.2	0.9	0.99
39	2016	nrr0	12631	99.6	99.4	8.3	8.3	0.1	0.9	0.99
40	2017	nrr0	14654	100.9	100.8	8.6	8.5	0.1	0.9	0.99
41	2018	nrr0	16398	100.4	100.5	8.0	7.9	-0.1	1.0	0.99
42	2019	nrr0	16594	100.3	100.3	8.9	8.9	0.0	0.9	0.99
43	2020	nrr0	18936	101.9	102.0	9.2	9.1	0.0	1.0	0.99
44	2021	nrr0	19360	100.2	100.3	8.5	8.4	-0.1	1.1	0.99
45	2022	nrr0	14523	100.6	100.7	8.6	8.3	-0.1	1.8	0.98
46	2023	nrr0	5	.	.	.	.	.	.	0.99
47	2015	nrr1	7623	98.0	98.1	7.9	7.8	-0.1	1.0	0.99
48	2016	nrr1	10527	97.8	97.9	8.4	8.4	-0.1	1.0	0.99
49	2017	nrr1	12211	98.7	98.7	8.3	8.2	-0.1	1.0	0.99
50	2018	nrr1	13801	99.8	99.9	8.0	7.9	-0.1	1.0	0.99
51	2019	nrr1	14014	99.9	99.9	8.7	8.6	0.0	1.0	0.99
52	2020	nrr1	15841	102.6	102.8	8.7	8.6	-0.1	1.2	0.99
53	2021	nrr1	10190	101.6	101.5	8.4	8.3	0.1	1.5	0.98
54	2022	nrr1	29	.	.	.	.	.	.	0.96
55	2015	nrr2	6021	97.5	97.6	8.1	8.0	-0.2	1.0	0.99
56	2016	nrr2	8385	97.5	97.6	9.0	9.0	-0.1	1.0	0.99
57	2017	nrr2	9667	97.9	98.1	8.7	8.7	-0.2	1.0	0.99
58	2018	nrr2	10919	98.9	99.1	8.7	8.7	-0.2	1.1	0.99
59	2019	nrr2	10848	100.1	100.1	9.4	9.4	0.0	1.2	0.99
60	2020	nrr2	8081	103.0	103.1	9.2	9.2	-0.1	1.6	0.99
61	2021	nrr2	38	.	.	.	.	.	.	0.98
62	2015	nrr3	4075	98.5	98.6	8.3	8.4	-0.1	1.1	0.99
63	2016	nrr3	5611	98.2	98.2	8.8	9.0	0.0	1.1	0.99
64	2017	nrr3	6471	98.7	98.7	8.9	9.1	-0.1	1.1	0.99
65	2018	nrr3	7256	99.1	99.2	8.9	9.1	0.0	1.2	0.99
66	2019	nrr3	4227	100.6	100.7	9.1	9.2	-0.1	1.7	0.98
67	2020	nrr3	70	.	.	.	.	.	.	0.93
68	2015	nrr	9661	97.7	97.8	7.9	8.0	-0.1	1.0	0.99
69	2016	nrr	13428	97.6	97.7	8.7	8.7	-0.1	1.0	0.99
70	2017	nrr	15694	98.1	98.2	8.5	8.6	-0.1	1.0	0.99
71	2018	nrr	17568	99.0	99.1	8.4	8.5	-0.1	1.0	0.99
72	2019	nrr	17870	99.6	99.7	9.0	9.0	-0.1	1.3	0.99
73	2020	nrr	20113	102.4	102.4	8.8	8.7	0.0	1.6	0.98
74	2021	nrr	20049	101.4	101.4	8.1	8.1	0.0	1.6	0.98

RDC sum sta for SS and previous breeding value for genotyped females with phenotype, by birth year

Obs	BYR	name	no	mean_ss	mean_oss	std_ss	std_oss	mean_dif	std_dif	corr_SS
75	2022	nrr	14534	102.6	102.7	7.5	7.5	-0.1	1.7	0.97
76	2023	nrr	5	.	.	.	.	.	.	0.97
77	2015	icf1	7692	96.9	97.1	8.0	8.0	-0.1	0.9	0.99
78	2016	icf1	10626	98.0	98.1	7.8	7.8	-0.1	0.8	0.99
79	2017	icf1	12329	96.9	97.0	7.7	7.7	-0.1	0.8	0.99
80	2018	icf1	13957	99.3	99.5	7.8	7.8	-0.2	0.8	0.99
81	2019	icf1	14146	99.3	99.3	7.4	7.4	-0.1	0.9	0.99
82	2020	icf1	16002	101.6	101.6	7.1	7.1	0.0	1.0	0.99
83	2021	icf1	9943	101.5	101.5	7.0	7.0	0.1	1.2	0.98
84	2022	icf1	9	.	.	.	.	.	.	0.98
85	2015	icf2	6086	97.7	97.9	9.5	9.7	-0.2	1.1	0.99
86	2016	icf2	8479	98.2	98.4	9.0	9.2	-0.2	0.9	1.00
87	2017	icf2	9778	96.9	97.1	9.1	9.3	-0.2	0.9	1.00
88	2018	icf2	11066	99.6	99.8	8.8	8.9	-0.2	0.9	0.99
89	2019	icf2	10976	99.2	99.4	8.6	8.7	-0.2	1.0	0.99
90	2020	icf2	7799	101.9	101.7	7.8	7.8	0.2	1.2	0.99
91	2021	icf2	16	.	.	.	.	.	.	0.98
92	2015	icf3	4134	97.3	97.7	9.8	10.1	-0.4	1.1	0.99
93	2016	icf3	5695	98.4	98.8	9.1	9.4	-0.4	1.0	0.99
94	2017	icf3	6578	96.9	97.2	9.2	9.5	-0.3	1.0	0.99
95	2018	icf3	7385	100.0	100.4	8.8	9.0	-0.4	1.1	0.99
96	2019	icf3	4114	99.9	100.0	8.6	8.6	-0.2	1.3	0.99
97	2020	icf3	32	.	.	.	.	.	.	0.99
98	2015	icf	8061	96.9	97.2	9.1	9.2	-0.3	1.0	0.99
99	2016	icf	11089	97.8	98.1	8.6	8.8	-0.2	0.9	1.00
100	2017	icf	12902	96.5	96.7	8.6	8.8	-0.2	0.9	0.99
101	2018	icf	14560	99.3	99.5	8.4	8.5	-0.3	0.9	0.99
102	2019	icf	14766	99.1	99.3	8.2	8.2	-0.1	1.0	0.99
103	2020	icf	16404	101.4	101.4	7.5	7.6	0.1	1.1	0.99
104	2021	icf	9947	101.4	101.4	7.4	7.4	0.0	1.3	0.98
105	2022	icf	9	.	.	.	.	.	.	0.98
106	2015	ifl0	8812	99.1	98.9	8.1	8.1	0.2	0.9	0.99
107	2016	ifl0	12252	99.1	99.0	8.4	8.4	0.1	0.9	0.99
108	2017	ifl0	14182	100.3	100.2	8.5	8.5	0.1	0.9	0.99
109	2018	ifl0	15880	100.1	100.1	8.0	7.9	0.0	0.9	0.99
110	2019	ifl0	16105	100.5	100.4	9.1	9.1	0.0	0.9	1.00
111	2020	ifl0	18409	102.1	102.2	9.0	8.9	-0.1	1.0	0.99

RDC sum sta for SS and previous breeding value for genotyped females with phenotype, by birth year

Obs	BYR	name	no	mean_ss	mean_oss	std_ss	std_oss	mean_dif	std_dif	corr_SS
112	2021	ifl0	18847	100.7	100.8	8.8	8.6	-0.1	1.0	0.99
113	2022	ifl0	14195	101.2	101.4	8.9	8.6	-0.2	1.8	0.98
114	2023	ifl0	5	.	.	.	.	.	.	0.99
115	2015	ifl1	7665	96.5	96.6	8.4	8.3	-0.1	1.1	0.99
116	2016	ifl1	10586	96.8	96.9	8.3	8.2	-0.1	1.0	0.99
117	2017	ifl1	12287	96.9	97.0	8.5	8.5	-0.1	1.0	0.99
118	2018	ifl1	13889	99.4	99.6	8.3	8.2	-0.2	1.0	0.99
119	2019	ifl1	14079	99.5	99.5	8.8	8.7	0.0	1.1	0.99
120	2020	ifl1	15941	103.2	103.4	8.6	8.5	-0.1	1.3	0.99
121	2021	ifl1	10298	102.2	102.1	8.2	8.2	0.1	1.6	0.98
122	2022	ifl1	30	.	.	.	.	.	.	0.96
123	2015	ifl2	6077	97.1	97.4	8.4	8.4	-0.3	1.1	0.99
124	2016	ifl2	8451	97.2	97.4	8.3	8.3	-0.3	1.0	0.99
125	2017	ifl2	9746	97.0	97.2	8.3	8.4	-0.2	1.0	0.99
126	2018	ifl2	11029	99.1	99.3	8.0	8.1	-0.3	1.0	0.99
127	2019	ifl2	10927	99.9	99.9	8.5	8.5	-0.1	1.2	0.99
128	2020	ifl2	8152	103.3	103.3	8.2	8.2	0.0	1.4	0.99
129	2021	ifl2	40	.	.	.	.	.	.	0.98
130	2015	ifl3	4113	97.6	97.9	8.4	8.4	-0.3	1.1	0.99
131	2016	ifl3	5676	97.7	98.0	8.2	8.3	-0.3	1.0	0.99
132	2017	ifl3	6545	97.6	97.8	8.1	8.2	-0.3	1.1	0.99
133	2018	ifl3	7354	99.4	99.6	7.8	7.9	-0.3	1.1	0.99
134	2019	ifl3	4314	100.7	100.7	8.2	8.1	0.0	1.4	0.99
135	2020	ifl3	72	.	.	.	.	.	.	0.97
136	2015	ifl	9602	96.5	96.7	8.5	8.5	-0.3	1.1	0.99
137	2016	ifl	13355	96.7	96.9	8.4	8.5	-0.2	1.0	0.99
138	2017	ifl	15558	96.6	96.8	8.5	8.6	-0.2	1.0	0.99
139	2018	ifl	17451	98.8	99.0	8.2	8.3	-0.2	1.1	0.99
140	2019	ifl	17755	99.3	99.3	8.8	8.8	-0.1	1.2	0.99
141	2020	ifl	20004	102.6	102.7	8.3	8.3	0.0	1.4	0.98
142	2021	ifl	19687	101.9	101.8	7.9	7.9	0.1	1.5	0.98
143	2022	ifl	14206	103.2	103.4	7.4	7.6	-0.2	1.7	0.97
144	2023	ifl	5	.	.	.	.	.	.	0.99
145	2015	ais0	9036	99.9	99.8	8.2	8.1	0.2	0.9	0.99
146	2016	ais0	12480	99.6	99.5	8.3	8.3	0.1	0.9	0.99
147	2017	ais0	14495	100.6	100.6	8.4	8.4	0.1	0.9	0.99
148	2018	ais0	16205	100.2	100.3	7.8	7.7	0.0	0.9	0.99

RDC sum sta for SS and previous breeding value for genotyped females with phenotype, by birth year

Obs	BYR	name	no	mean_ss	mean_oss	std_ss	std_oss	mean_dif	std_dif	corr_SS
149	2019	ais0	16339	100.4	100.3	9.1	9.1	0.0	0.9	1.00
150	2020	ais0	18703	101.9	102.0	9.1	9.0	-0.1	1.0	0.99
151	2021	ais0	19128	100.2	100.4	8.5	8.3	-0.2	1.0	0.99
152	2022	ais0	14490	100.1	100.2	8.5	8.3	-0.1	1.7	0.98
153	2023	ais0	5	.	.	.	.	.	.	0.98
154	2015	ais1	7587	97.7	97.8	8.2	8.1	0.0	1.0	0.99
155	2016	ais1	10493	97.5	97.6	8.7	8.6	-0.1	0.9	0.99
156	2017	ais1	12146	98.1	98.1	8.5	8.4	0.0	0.9	0.99
157	2018	ais1	13753	99.5	99.6	8.5	8.4	-0.1	0.9	0.99
158	2019	ais1	13942	99.3	99.3	9.1	9.0	0.1	0.9	0.99
159	2020	ais1	15775	103.0	103.1	9.4	9.3	-0.1	1.1	0.99
160	2021	ais1	9661	101.4	101.6	8.8	8.5	-0.2	1.4	0.99
161	2022	ais1	9	.	.	.	.	.	.	0.95
162	2015	ais2	6002	98.4	98.5	8.0	8.0	-0.1	1.0	0.99
163	2016	ais2	8357	98.3	98.4	8.5	8.5	-0.1	0.9	0.99
164	2017	ais2	9617	98.3	98.4	8.2	8.2	-0.1	0.9	0.99
165	2018	ais2	10857	99.0	99.2	8.3	8.3	-0.2	1.0	0.99
166	2019	ais2	10801	99.8	99.8	8.5	8.6	0.0	1.0	0.99
167	2020	ais2	7622	102.8	102.8	8.7	8.6	0.0	1.3	0.99
168	2021	ais2	13	.	.	.	.	.	.	0.98
169	2015	ais3	4055	99.1	99.2	8.1	8.1	-0.1	1.0	0.99
170	2016	ais3	5580	99.0	99.1	8.5	8.5	-0.1	0.9	0.99
171	2017	ais3	6439	98.9	99.0	8.3	8.3	-0.2	1.0	0.99
172	2018	ais3	7222	98.9	99.1	8.4	8.5	-0.1	1.0	0.99
173	2019	ais3	3954	100.7	100.6	8.4	8.5	0.1	1.5	0.98
174	2020	ais3	29	.	.	.	.	.	.	0.98
175	2015	ais	9643	98.2	98.3	8.1	8.0	-0.1	0.9	0.99
176	2016	ais	13395	98.2	98.3	8.6	8.6	-0.1	0.9	0.99
177	2017	ais	15653	98.3	98.4	8.3	8.3	-0.1	0.9	0.99
178	2018	ais	17515	99.0	99.1	8.4	8.4	-0.1	0.9	0.99
179	2019	ais	17812	99.6	99.6	8.7	8.7	0.0	1.1	0.99
180	2020	ais	20036	102.2	102.3	8.7	8.6	0.0	1.3	0.99
181	2021	ais	19872	101.1	101.3	7.8	7.6	-0.2	1.5	0.98
182	2022	ais	14499	102.0	102.1	7.5	7.4	-0.1	1.5	0.98
183	2023	ais	5	.	.	.	.	.	.	0.99
184	2015	hst0	3249	98.6	98.8	8.5	8.6	-0.2	1.0	0.99
185	2016	hst0	4329	98.7	99.1	8.8	8.9	-0.3	1.0	0.99

RDC sum sta for SS and previous breeding value for genotyped females with phenotype, by birth year

Obs	BYR	name	no	mean_ss	mean_oss	std_ss	std_oss	mean_dif	std_dif	corr_SS
186	2017	hst0	4281	98.8	99.1	7.9	7.9	-0.4	1.1	0.99
187	2018	hst0	5074	99.5	100.0	8.1	8.1	-0.4	1.1	0.99
188	2019	hst0	5314	100.9	101.2	7.7	7.8	-0.3	1.1	0.99
189	2020	hst0	6502	101.2	101.0	7.8	7.9	0.2	1.3	0.99
190	2021	hst0	6579	102.2	102.4	7.6	7.7	-0.2	1.6	0.98
191	2022	hst0	4588	102.4	102.7	8.2	8.2	-0.4	2.1	0.97
192	2015	hst1	2651	98.5	98.7	8.2	8.2	-0.1	1.0	0.99
193	2016	hst1	3576	99.2	99.4	8.9	8.9	-0.1	1.0	0.99
194	2017	hst1	3580	98.2	98.4	8.2	8.2	-0.2	1.0	0.99
195	2018	hst1	4188	100.4	100.6	8.0	8.0	-0.2	1.1	0.99
196	2019	hst1	4475	100.6	100.8	7.6	7.6	-0.1	1.1	0.99
197	2020	hst1	5309	101.4	101.3	8.0	8.0	0.1	1.2	0.99
198	2021	hst1	2986	102.5	102.2	7.6	7.4	0.3	2.0	0.96
199	2022	hst1	5	.	.	.	.	.	.	0.89
200	2015	hst2	1971	99.1	99.7	9.5	9.5	-0.6	1.1	0.99
201	2016	hst2	2667	100.0	100.5	9.9	9.9	-0.5	1.1	0.99
202	2017	hst2	2633	98.5	99.0	9.4	9.4	-0.5	1.1	0.99
203	2018	hst2	3104	100.4	100.8	8.8	8.8	-0.4	1.2	0.99
204	2019	hst2	3219	100.8	101.2	8.8	8.8	-0.4	1.4	0.99
205	2020	hst2	2074	101.4	101.1	8.5	8.6	0.3	1.8	0.98
206	2015	hst3	1254	99.4	100.0	10.0	10.1	-0.7	1.2	0.99
207	2016	hst3	1680	101.4	102.2	10.3	10.4	-0.7	1.2	0.99
208	2017	hst3	1604	98.7	99.5	9.5	9.4	-0.8	1.4	0.99
209	2018	hst3	1896	101.2	101.7	8.9	9.1	-0.5	1.4	0.99
210	2019	hst3	1007	102.1	102.7	9.0	9.0	-0.6	2.0	0.98
211	2020	hst3	7	.	.	.	.	.	.	0.98
212	2015	hst	3486	98.5	99.0	8.8	8.9	-0.5	1.0	0.99
213	2016	hst	4733	99.9	100.4	9.4	9.4	-0.5	1.0	0.99
214	2017	hst	4762	98.2	98.7	8.6	8.6	-0.5	1.1	0.99
215	2018	hst	5545	100.3	100.7	8.3	8.4	-0.4	1.1	0.99
216	2019	hst	5836	100.6	101.0	8.1	8.1	-0.4	1.4	0.98
217	2020	hst	7027	100.9	100.7	8.0	8.1	0.2	1.6	0.98
218	2021	hst	6878	102.0	101.9	7.5	7.5	0.0	1.8	0.97
219	2022	hst	4594	102.1	102.1	7.6	7.6	0.0	1.7	0.98
220	2015	fert	8061	96.9	97.1	8.5	8.5	-0.2	1.0	0.99
221	2016	fert	11089	97.1	97.3	8.4	8.5	-0.2	1.0	0.99
222	2017	fert	12902	97.0	97.2	8.5	8.5	-0.2	1.0	0.99

RDC sum sta for SS and previous breeding value for genotyped females with phenotype, by birth year

Obs	BYR	name	no	mean_ss	mean_oss	std_ss	std_oss	mean_dif	std_dif	corr_SS
223	2018	fert	14560	99.0	99.2	8.2	8.3	-0.2	1.0	0.99
224	2019	fert	14766	99.6	99.6	8.9	8.9	0.0	1.1	0.99
225	2020	fert	16404	102.8	102.9	8.6	8.5	-0.1	1.3	0.99
226	2021	fert	9947	101.8	101.8	7.9	7.9	0.0	1.3	0.99
227	2022	fert	9	.	.	.	.	.	.	0.96

RDC sum sta for SS and previous breeding value for genotyped females with phenotype, by birth year

Obs	diff	d_cr	d_nrr	d_icf	d_ifl	d_ais	d_hst	d_fert
1	-22	.	.	1	.	.	.	.
2	-16	.	.	1	.	.	.	.
3	-15	.	.	.	1	.	.	1
4	-14	.	1	.	1	.	.	.
5	-13	.	1	.	.	.	.	1
6	-12	1	.	.	.	2	.	1
7	-11	2	1	.	.	.	.	.
8	-10	.	.	1	2	1	.	1
9	-9	.	.	.	.	.	1	.
10	-8	2	2	.	1	3	1	.
11	-7	2	5	2	5	3	3	1
12	-6	1	28	2	37	8	7	6
13	-5	11	186	7	184	80	64	20
14	-4	210	997	68	760	459	281	142
15	-3	1755	3358	686	3172	2360	1478	1247
16	-2	9280	10704	5872	12206	10552	5481	7018
17	-1	30905	29591	24277	31611	32351	11473	23074
18	0	45893	42642	35350	41084	45305	12126	32211
19	1	28012	27743	17421	26381	27347	7184	18517
20	2	7602	10184	3543	9407	8219	3162	4735
21	3	1459	2838	441	2332	1482	1175	687
22	4	145	554	54	366	227	332	60
23	5	12	76	4	60	22	79	11
24	6	1	4	1	5	4	13	.
25	7	3	1	3	.	2	.	.
26	8	.	3	.	.	1	1	.
27	9	2	2	.	3	.	.	.
28	10	2	1	.	.	1	.	.
29	11	.	.	.	.	1	.	1
30	12	1	.	.	3	.	.	3
31	13	.	.	.	2	.	.	1
32	17	.	.	2	.	.	.	.
33	18	.	.	1	.	.	.	.
34	20	.	.	1	.	.	.	.

RDC sum sta for SS and previous breeding value for genotyped females with phenotype, by birth year

Obs	diff	p_cr	p_nrr	p_icf	p_ifl	p_ais	p_hst	p_fert
1	-22	.	.	0	.	.	.	.
2	-16	.	.	0	.	.	.	.
3	-15	.	.	.	0	.	.	0
4	-14	.	0	.	0	.	.	.
5	-13	.	0	.	.	.	.	0
6	-12	0	.	.	.	0	.	0
7	-11	0	0	.	.	.	.	.
8	-10	.	.	0	0	0	.	0
9	-9	.	.	.	.	.	0	.
10	-8	0	0	.	0	0	0	.
11	-7	0	0	0	0	0	0	0
12	-6	0	0	0	0	0	0	0
13	-5	0	0	0	0	0	0	0
14	-4	0	1	0	1	0	1	0
15	-3	1	3	1	2	2	3	1
16	-2	7	8	7	10	8	13	8
17	-1	25	23	28	25	25	27	26
18	0	37	33	40	32	35	28	37
19	1	22	22	20	21	21	17	21
20	2	6	8	4	7	6	7	5
21	3	1	2	1	2	1	3	1
22	4	0	0	0	0	0	1	0
23	5	0	0	0	0	0	0	0
24	6	0	0	0	0	0	0	.
25	7	0	0	0	.	0	.	.
26	8	.	0	.	.	0	0	.
27	9	0	0	.	0	.	.	.
28	10	0	0	.	.	0	.	.
29	11	.	.	.	.	0	.	0
30	12	0	.	.	0	.	.	0
31	13	.	.	.	0	.	.	0
32	17	.	.	0	.	.	.	.
33	18	.	.	0	.	.	.	.
34	20	.	.	0	.	.	.	.

RDC summery stastistics for SS and previous breeding value for nongenotyped females with phenotype, by birth year

Obs	BYR	name	no	mean_ss	mean_oss	std_ss	std_oss	mean_dif	std_dif	corr_SS
1	2015	cr0	64051	95.6	95.3	7.1	7.1	0.3	0.5	1.00
2	2016	cr0	54914	96.4	96.2	7.3	7.3	0.3	0.5	1.00
3	2017	cr0	47379	97.1	96.9	7.2	7.2	0.2	0.5	1.00
4	2018	cr0	41421	97.7	97.5	6.7	6.7	0.2	0.5	1.00
5	2019	cr0	36076	97.9	97.9	8.1	8.2	0.1	0.5	1.00
6	2020	cr0	33877	100.3	100.3	8.6	8.6	0.0	0.7	1.00
7	2021	cr0	30229	99.2	99.2	7.4	7.3	0.0	0.8	0.99
8	2022	cr0	10692	100.3	100.3	8.4	8.1	0.0	1.2	0.99
9	2015	cr1	53019	93.3	93.2	6.4	6.4	0.1	0.4	1.00
10	2016	cr1	45812	94.6	94.5	6.7	6.6	0.1	0.5	1.00
11	2017	cr1	39593	94.6	94.6	6.7	6.6	0.1	0.5	1.00
12	2018	cr1	34683	96.4	96.4	6.9	6.9	0.0	0.5	1.00
13	2019	cr1	29803	96.6	96.6	7.7	7.7	0.0	0.7	1.00
14	2020	cr1	27578	100.3	100.4	8.3	8.3	-0.1	1.0	0.99
15	2021	cr1	9008	100.4	100.5	7.5	7.3	-0.1	1.2	0.99
16	2022	cr1	2	.	.	.	.	.	.	1.00
17	2015	cr2	38648	94.0	94.0	6.2	6.2	0.0	0.5	1.00
18	2016	cr2	34032	95.2	95.3	6.4	6.3	0.0	0.5	1.00
19	2017	cr2	29126	95.1	95.1	6.5	6.5	0.0	0.5	1.00
20	2018	cr2	25334	96.8	96.9	6.5	6.4	-0.1	0.6	1.00
21	2019	cr2	20651	97.2	97.3	7.1	7.1	-0.1	0.9	0.99
22	2020	cr2	7112	100.7	100.8	7.6	7.5	-0.1	1.0	0.99
23	2021	cr2	2	.	.	.	.	.	.	1.00
24	2015	cr3	24972	95.0	95.0	6.4	6.2	0.0	0.5	1.00
25	2016	cr3	21978	96.0	96.1	6.4	6.3	0.0	0.6	1.00
26	2017	cr3	18284	96.0	96.0	6.5	6.4	0.0	0.6	1.00
27	2018	cr3	14632	97.6	97.7	6.3	6.2	-0.1	0.7	0.99
28	2019	cr3	3950	98.3	98.3	6.4	6.4	0.0	1.1	0.99
29	2020	cr3	7	.	.	.	.	.	.	0.99
30	2015	cr	70051	93.5	93.4	6.3	6.2	0.0	0.5	1.00
31	2016	cr	60095	94.7	94.7	6.4	6.3	0.0	0.5	1.00
32	2017	cr	51944	94.6	94.6	6.5	6.5	0.0	0.5	1.00
33	2018	cr	45397	96.3	96.3	6.6	6.6	-0.1	0.6	1.00
34	2019	cr	39496	96.6	96.7	7.3	7.3	-0.1	0.9	0.99
35	2020	cr	36623	100.1	100.3	7.7	7.7	-0.1	1.1	0.99
36	2021	cr	31097	99.8	99.9	6.6	6.3	-0.1	1.3	0.98

RDC summery stastistics for SS and previous breeding value for nongenotyped females with phenotype, by birth year

Obs	BYR	name	no	mean_ss	mean_oss	std_ss	std_oss	mean_dif	std_dif	corr_SS
37	2022	cr	10694	101.2	101.3	6.7	6.3	-0.1	1.3	0.98
38	2015	nrr0	60258	98.6	98.4	6.8	6.8	0.2	0.5	1.00
39	2016	nrr0	51766	98.8	98.6	6.9	6.9	0.2	0.5	1.00
40	2017	nrr0	44309	99.5	99.4	7.3	7.3	0.1	0.5	1.00
41	2018	nrr0	38844	99.1	99.1	6.6	6.6	0.0	0.6	1.00
42	2019	nrr0	33810	98.9	98.9	7.6	7.7	0.0	0.7	1.00
43	2020	nrr0	31636	100.3	100.3	8.0	8.0	0.0	0.8	1.00
44	2021	nrr0	28669	98.8	98.8	7.0	6.9	0.0	0.8	0.99
45	2022	nrr0	16995	99.2	99.1	7.4	7.2	0.1	1.5	0.98
46	2023	nrr0	12	.	.	.	.	.	.	0.94
47	2015	nrr1	51187	96.6	96.7	6.4	6.3	-0.1	0.5	1.00
48	2016	nrr1	44189	97.1	97.2	6.8	6.8	-0.1	0.5	1.00
49	2017	nrr1	38201	97.3	97.4	6.9	6.9	-0.1	0.6	1.00
50	2018	nrr1	33464	98.1	98.3	6.6	6.6	-0.1	0.6	1.00
51	2019	nrr1	28850	97.9	97.9	7.5	7.4	0.0	0.8	0.99
52	2020	nrr1	27134	100.2	100.4	7.3	7.3	-0.1	1.0	0.99
53	2021	nrr1	13470	99.9	99.9	6.8	6.7	0.0	1.3	0.98
54	2022	nrr1	36	.	.	.	.	.	.	0.95
55	2015	nrr2	37319	96.5	96.7	6.5	6.5	-0.2	0.6	1.00
56	2016	nrr2	32923	97.0	97.2	7.2	7.3	-0.2	0.6	1.00
57	2017	nrr2	28126	97.1	97.2	7.4	7.5	-0.1	0.6	1.00
58	2018	nrr2	24486	97.6	97.8	7.3	7.3	-0.2	0.7	1.00
59	2019	nrr2	20657	98.0	98.1	8.0	8.0	-0.1	1.0	0.99
60	2020	nrr2	10954	100.5	100.7	7.8	7.7	-0.2	1.4	0.98
61	2021	nrr2	54	.	.	.	.	.	.	0.95
62	2015	nrr3	24070	97.7	97.7	6.7	6.9	0.0	0.7	1.00
63	2016	nrr3	21148	98.0	98.0	7.3	7.5	0.0	0.7	1.00
64	2017	nrr3	17713	98.1	98.1	7.8	8.0	0.0	0.7	1.00
65	2018	nrr3	14842	98.2	98.3	7.5	7.7	0.0	0.9	0.99
66	2019	nrr3	6478	98.9	98.9	7.8	7.9	0.0	1.4	0.99
67	2020	nrr3	65	.	.	.	.	.	.	0.96
68	2015	nrr	68754	96.7	96.8	6.3	6.3	-0.1	0.5	1.00
69	2016	nrr	58983	97.1	97.2	6.9	6.9	-0.1	0.5	1.00
70	2017	nrr	50910	97.1	97.2	7.2	7.2	-0.1	0.6	1.00
71	2018	nrr	44574	97.6	97.7	6.9	6.9	-0.1	0.7	1.00
72	2019	nrr	38721	97.8	97.8	7.6	7.6	-0.1	1.0	0.99

RDC summery stastistics for SS and previous breeding value for nongenotyped females with phenotype, by birth year

Obs	BYR	name	no	mean_ss	mean_oss	std_ss	std_oss	mean_dif	std_dif	corr_SS
73	2020	nrr	36079	100.2	100.3	7.2	7.2	-0.1	1.4	0.98
74	2021	nrr	30588	99.8	99.9	6.3	6.2	0.0	1.4	0.97
75	2022	nrr	17008	100.8	101.0	5.8	5.8	-0.1	1.5	0.97
76	2023	nrr	12	.	.	.	.	.	.	0.97
77	2015	icf1	51705	96.6	96.7	6.5	6.5	-0.1	0.5	1.00
78	2016	icf1	44652	97.8	98.0	6.2	6.2	-0.1	0.5	1.00
79	2017	icf1	38563	96.7	96.8	6.0	6.0	-0.1	0.5	1.00
80	2018	icf1	33790	98.5	98.7	6.2	6.2	-0.2	0.6	1.00
81	2019	icf1	29103	98.4	98.5	5.9	5.9	-0.1	0.7	0.99
82	2020	icf1	27412	100.1	100.2	5.7	5.7	0.0	0.9	0.99
83	2021	icf1	13346	100.5	100.4	5.5	5.4	0.1	1.1	0.98
84	2022	icf1	16	.	.	.	.	.	.	0.87
85	2015	icf2	37748	97.5	97.8	8.1	8.3	-0.3	0.6	1.00
86	2016	icf2	33249	98.5	98.7	7.3	7.4	-0.2	0.6	1.00
87	2017	icf2	28463	97.0	97.2	7.5	7.7	-0.2	0.6	1.00
88	2018	icf2	24780	99.2	99.4	6.9	7.1	-0.2	0.7	1.00
89	2019	icf2	20925	98.8	99.0	6.8	6.9	-0.2	0.9	0.99
90	2020	icf2	10764	100.9	100.8	6.0	6.0	0.1	1.2	0.98
91	2021	icf2	20	.	.	.	.	.	.	0.98
92	2015	icf3	24422	97.2	97.6	8.4	8.7	-0.4	0.6	1.00
93	2016	icf3	21482	98.4	98.8	7.6	7.8	-0.4	0.6	1.00
94	2017	icf3	17961	97.1	97.4	7.6	7.9	-0.3	0.7	1.00
95	2018	icf3	15048	99.5	99.9	7.0	7.3	-0.4	0.8	0.99
96	2019	icf3	6305	99.7	100.0	6.8	6.8	-0.3	1.1	0.99
97	2020	icf3	29	.	.	.	.	.	.	0.98
98	2015	icf	53985	96.7	97.0	7.5	7.7	-0.3	0.5	1.00
99	2016	icf	46604	97.9	98.2	6.9	7.0	-0.3	0.5	1.00
100	2017	icf	40093	96.5	96.8	6.9	7.0	-0.2	0.6	1.00
101	2018	icf	35118	98.6	98.9	6.6	6.8	-0.3	0.7	1.00
102	2019	icf	30076	98.5	98.7	6.4	6.4	-0.2	0.9	0.99
103	2020	icf	27835	100.2	100.2	5.9	5.9	0.0	1.1	0.98
104	2021	icf	13355	100.5	100.5	5.6	5.6	0.0	1.3	0.98
105	2022	icf	16	.	.	.	.	.	.	0.90
106	2015	ifl0	57954	97.5	97.3	7.0	7.1	0.2	0.5	1.00
107	2016	ifl0	49763	98.3	98.1	7.3	7.3	0.2	0.5	1.00
108	2017	ifl0	42586	98.8	98.6	7.4	7.4	0.1	0.5	1.00

RDC summery stastistics for SS and previous breeding value for nongenotyped females with phenotype, by birth year

Obs	BYR	name	no	mean_ss	mean_oss	std_ss	std_oss	mean_dif	std_dif	corr_SS
109	2018	ifl0	37299	98.8	98.7	6.9	6.9	0.0	0.6	1.00
110	2019	ifl0	32429	98.8	98.8	8.0	8.1	0.1	0.6	1.00
111	2020	ifl0	30474	100.2	100.2	8.2	8.2	0.0	0.7	1.00
112	2021	ifl0	27615	99.0	99.0	7.6	7.5	0.0	0.9	0.99
113	2022	ifl0	16390	99.5	99.5	8.2	8.0	0.0	1.6	0.98
114	2023	ifl0	12	.	.	.	.	.	.	0.93
115	2015	ifl1	51404	95.2	95.4	6.6	6.6	-0.2	0.5	1.00
116	2016	ifl1	44423	96.3	96.5	6.5	6.5	-0.1	0.5	1.00
117	2017	ifl1	38328	95.8	95.9	6.5	6.6	-0.1	0.6	1.00
118	2018	ifl1	33568	97.6	97.8	6.8	6.8	-0.2	0.6	1.00
119	2019	ifl1	28947	97.3	97.3	7.3	7.2	-0.1	0.9	0.99
120	2020	ifl1	27250	100.4	100.6	7.4	7.4	-0.1	1.1	0.99
121	2021	ifl1	13634	100.0	100.0	6.7	6.6	0.1	1.4	0.98
122	2022	ifl1	37	.	.	.	.	.	.	0.96
123	2015	ifl2	37552	96.3	96.5	6.7	6.8	-0.3	0.6	1.00
124	2016	ifl2	33081	97.1	97.4	6.6	6.7	-0.3	0.6	1.00
125	2017	ifl2	28316	96.3	96.5	6.4	6.5	-0.2	0.6	1.00
126	2018	ifl2	24611	97.9	98.1	6.3	6.4	-0.3	0.7	0.99
127	2019	ifl2	20802	98.1	98.2	6.8	6.8	-0.1	1.0	0.99
128	2020	ifl2	11082	101.0	101.1	6.6	6.6	-0.1	1.3	0.98
129	2021	ifl2	56	.	.	.	.	.	.	0.98
130	2015	ifl3	24315	96.9	97.2	6.9	7.0	-0.3	0.6	1.00
131	2016	ifl3	21372	97.8	98.1	6.6	6.7	-0.3	0.6	1.00
132	2017	ifl3	17871	97.1	97.3	6.4	6.6	-0.3	0.7	0.99
133	2018	ifl3	14993	98.5	98.8	6.2	6.4	-0.3	0.8	0.99
134	2019	ifl3	6580	99.1	99.3	6.4	6.4	-0.1	1.2	0.98
135	2020	ifl3	68	.	.	.	.	.	.	0.96
136	2015	ifl	68168	95.5	95.8	6.7	6.7	-0.3	0.5	1.00
137	2016	ifl	58532	96.6	96.9	6.5	6.6	-0.3	0.5	1.00
138	2017	ifl	50438	95.7	95.9	6.4	6.5	-0.2	0.6	1.00
139	2018	ifl	44130	97.4	97.6	6.5	6.6	-0.3	0.7	0.99
140	2019	ifl	38284	97.4	97.5	7.0	7.0	-0.1	1.0	0.99
141	2020	ifl	35690	100.3	100.4	6.8	6.8	-0.1	1.3	0.98
142	2021	ifl	29784	100.0	100.0	5.9	5.8	0.0	1.4	0.97
143	2022	ifl	16404	101.0	101.3	5.6	5.8	-0.2	1.5	0.97
144	2023	ifl	12	.	.	.	.	.	.	0.94

RDC summery stastistics for SS and previous breeding value for nongenotyped females with phenotype, by birth year

Obs	BYR	name	no	mean_ss	mean_oss	std_ss	std_oss	mean_dif	std_dif	corr_SS
145	2015	ais0	58934	98.8	98.6	6.8	6.8	0.2	0.5	1.00
146	2016	ais0	50696	99.1	98.9	6.8	6.8	0.2	0.5	1.00
147	2017	ais0	43401	99.4	99.3	7.1	7.1	0.1	0.5	1.00
148	2018	ais0	37998	99.0	99.0	6.3	6.4	0.0	0.6	1.00
149	2019	ais0	33108	98.9	98.8	7.8	7.8	0.1	0.6	1.00
150	2020	ais0	30947	100.2	100.3	7.9	7.9	0.0	0.8	1.00
151	2021	ais0	28172	98.9	98.9	6.9	6.8	-0.1	0.9	0.99
152	2022	ais0	17073	98.7	98.7	7.4	7.2	0.0	1.5	0.98
153	2023	ais0	12	.	.	.	.	.	.	0.93
154	2015	ais1	50601	96.6	96.7	6.4	6.3	-0.1	0.5	1.00
155	2016	ais1	43770	97.2	97.2	6.9	6.8	-0.1	0.5	1.00
156	2017	ais1	37821	97.0	97.1	6.8	6.7	0.0	0.5	1.00
157	2018	ais1	33104	97.9	98.0	6.9	6.8	-0.1	0.6	1.00
158	2019	ais1	28509	97.4	97.4	7.5	7.5	0.0	0.7	1.00
159	2020	ais1	26878	100.6	100.7	7.9	8.0	-0.1	0.9	0.99
160	2021	ais1	12865	99.9	100.1	7.0	6.8	-0.1	1.2	0.98
161	2022	ais1	13	.	.	.	.	.	.	0.94
162	2015	ais2	36976	97.9	98.0	6.3	6.3	-0.1	0.5	1.00
163	2016	ais2	32642	98.3	98.5	6.7	6.8	-0.1	0.5	1.00
164	2017	ais2	27851	97.9	98.0	6.6	6.6	-0.1	0.6	1.00
165	2018	ais2	24259	98.1	98.3	6.5	6.6	-0.2	0.7	1.00
166	2019	ais2	20492	98.3	98.4	7.0	7.0	0.0	0.9	0.99
167	2020	ais2	10392	100.9	101.0	7.0	6.9	-0.1	1.2	0.99
168	2021	ais2	19	.	.	.	.	.	.	0.98
169	2015	ais3	23841	98.6	98.7	6.5	6.6	-0.1	0.6	1.00
170	2016	ais3	20958	99.1	99.3	6.9	7.0	-0.1	0.6	1.00
171	2017	ais3	17562	98.7	98.9	6.8	6.9	-0.1	0.6	1.00
172	2018	ais3	14715	98.4	98.6	6.8	6.9	-0.2	0.7	0.99
173	2019	ais3	6067	99.4	99.4	7.0	7.1	0.0	1.3	0.98
174	2020	ais3	27	.	.	.	.	.	.	0.96
175	2015	ais	68378	97.6	97.7	6.2	6.2	-0.1	0.5	1.00
176	2016	ais	58710	98.2	98.3	6.6	6.7	-0.1	0.5	1.00
177	2017	ais	50689	97.7	97.8	6.5	6.5	-0.1	0.5	1.00
178	2018	ais	44377	98.0	98.1	6.6	6.6	-0.2	0.6	1.00
179	2019	ais	38508	98.0	98.0	7.1	7.2	0.0	0.9	0.99
180	2020	ais	35797	100.5	100.6	7.0	6.9	-0.1	1.2	0.98

RDC summery stastistics for SS and previous breeding value for nongenotyped females with phenotype, by birth year

Obs	BYR	name	no	mean_ss	mean_oss	std_ss	std_oss	mean_dif	std_dif	corr_SS
181	2021	ais	30186	99.8	100.0	5.8	5.6	-0.2	1.3	0.97
182	2022	ais	17083	100.5	100.7	5.6	5.4	-0.2	1.4	0.97
183	2023	ais	12	.	.	.	.	.	.	0.94
184	2015	hst0	20385	97.6	97.9	6.8	6.9	-0.3	0.6	1.00
185	2016	hst0	17603	98.2	98.6	6.8	6.9	-0.3	0.6	1.00
186	2017	hst0	16083	97.8	98.2	6.3	6.3	-0.4	0.6	1.00
187	2018	hst0	14930	98.4	98.8	6.4	6.4	-0.4	0.7	0.99
188	2019	hst0	13577	99.6	100.0	6.2	6.2	-0.4	0.8	0.99
189	2020	hst0	12496	99.7	99.7	6.4	6.4	0.1	1.0	0.99
190	2021	hst0	11028	100.6	100.7	6.1	6.2	-0.1	1.4	0.97
191	2022	hst0	5247	100.6	101.0	6.5	6.5	-0.4	1.8	0.96
192	2023	hst0	1	.	.	.	.	.	.	.
193	2015	hst1	18027	97.5	97.7	6.6	6.5	-0.1	0.6	1.00
194	2016	hst1	15940	98.8	98.9	7.2	7.1	-0.1	0.6	1.00
195	2017	hst1	14848	97.8	98.0	6.5	6.5	-0.2	0.7	0.99
196	2018	hst1	13757	99.2	99.5	6.6	6.5	-0.2	0.7	0.99
197	2019	hst1	12072	99.3	99.5	5.9	5.9	-0.2	0.9	0.99
198	2020	hst1	11195	100.1	100.1	6.4	6.3	0.0	1.0	0.99
199	2021	hst1	4513	101.2	101.0	6.0	5.8	0.3	1.7	0.96
200	2022	hst1	6	.	.	.	.	.	.	0.94
201	2015	hst2	12606	98.7	99.4	7.5	7.5	-0.6	0.7	1.00
202	2016	hst2	11617	100.0	100.6	8.0	8.0	-0.6	0.7	1.00
203	2017	hst2	10777	98.5	99.1	7.8	7.8	-0.5	0.7	1.00
204	2018	hst2	9757	99.7	100.2	6.8	6.8	-0.5	0.8	0.99
205	2019	hst2	8164	100.2	100.6	6.7	6.7	-0.4	1.1	0.99
206	2020	hst2	3320	101.1	101.0	6.8	6.8	0.1	1.6	0.97
207	2021	hst2	5	.	.	.	.	.	.	0.99
208	2015	hst3	7750	98.8	99.6	8.5	8.6	-0.8	0.8	1.00
209	2016	hst3	7198	101.2	101.9	8.7	8.8	-0.7	0.9	1.00
210	2017	hst3	6277	99.3	100.1	8.3	8.3	-0.8	1.0	0.99
211	2018	hst3	5484	100.8	101.2	7.4	7.4	-0.5	1.1	0.99
212	2019	hst3	1901	101.8	102.3	7.3	7.1	-0.4	1.8	0.97
213	2020	hst3	7	.	.	.	.	.	.	0.55
214	2015	hst	25239	97.9	98.5	7.0	7.0	-0.5	0.6	1.00
215	2016	hst	21940	99.7	100.2	7.5	7.6	-0.5	0.6	1.00
216	2017	hst	20193	98.2	98.7	7.0	7.0	-0.5	0.7	1.00

RDC summery stastistics for SS and previous breeding value for nongenotyped females with phenotype, by birth year

Obs	BYR	name	no	mean_ss	mean_oss	std_ss	std_oss	mean_dif	std_dif	corr_SS
217	2018	hst	18590	99.5	99.9	6.4	6.4	-0.4	0.8	0.99
218	2019	hst	16481	99.9	100.4	6.0	6.0	-0.4	1.1	0.98
219	2020	hst	15102	100.4	100.3	5.9	6.0	0.1	1.4	0.97
220	2021	hst	11924	101.4	101.4	5.3	5.2	0.0	1.7	0.95
221	2022	hst	5252	101.5	101.6	5.2	5.1	-0.1	1.6	0.95
222	2023	hst	1	.	.	.	.	.	.	.
223	2015	fert	53985	95.9	96.1	6.7	6.8	-0.2	0.5	1.00
224	2016	fert	46604	96.9	97.1	6.6	6.6	-0.2	0.5	1.00
225	2017	fert	40093	96.2	96.3	6.5	6.6	-0.2	0.6	1.00
226	2018	fert	35118	97.6	97.8	6.6	6.6	-0.2	0.6	1.00
227	2019	fert	30076	97.6	97.7	7.3	7.3	-0.1	0.9	0.99
228	2020	fert	27835	100.4	100.5	7.1	7.1	-0.1	1.2	0.99
229	2021	fert	13355	100.1	100.2	6.2	6.1	-0.1	1.2	0.98
230	2022	fert	16	.	.	.	.	.	.	0.96

RDC summery stastistics for SS and previous breeding value for nongenotyped females with phenotype, by birth year

Obs	diff	d_cr	d_nrr	d_icf	d_ifl	d_ais	d_hst	d_fert
1	-10	.	.	.	.	.	1	.
2	-9	1	.	1	1	.	1	.
3	-8	2	2	.	3	1	8	.
4	-7	2	3	5	8	7	20	3
5	-6	3	20	27	35	28	44	15
6	-5	33	125	90	173	131	121	55
7	-4	166	700	236	907	802	419	256
8	-3	1589	4222	934	3208	2505	1379	1210
9	-2	9094	11154	4940	12138	9564	8567	5825
10	-1	57500	69042	66807	90592	70820	51532	59642
11	0	220329	199488	146816	186451	207735	54676	150255
12	1	47941	47765	23308	36865	43282	11614	25260
13	2	7304	10540	3145	9010	7617	4608	3823
14	3	1272	2172	619	1621	1038	1385	592
15	4	118	332	116	322	177	257	111
16	5	28	49	27	75	23	72	26
17	6	7	10	8	22	6	14	5
18	7	3	3	3	4	1	3	1
19	8	3	2	.	5	1	1	3
20	9	1	.	.	2	2	.	.
21	10	1	.	.	.	.	.	.

RDC summery stastistics for SS and previous breeding value for nongenotyped females with phenotype, by birth year

Obs	diff	p_cr	p_nrr	p_icf	p_ifl	p_ais	p_hst	p_fert
1	-10	.	.	.	.	.	0	.
2	-9	0	.	0	0	.	0	.
3	-8	0	0	.	0	0	0	.
4	-7	0	0	0	0	0	0	0
5	-6	0	0	0	0	0	0	0
6	-5	0	0	0	0	0	0	0
7	-4	0	0	0	0	0	0	0
8	-3	0	1	0	1	1	1	0
9	-2	3	3	2	4	3	6	2
10	-1	17	20	27	27	21	38	24
11	0	64	58	59	55	60	41	61
12	1	14	14	9	11	13	9	10
13	2	2	3	1	3	2	3	2
14	3	0	1	0	0	0	1	0
15	4	0	0	0	0	0	0	0
16	5	0	0	0	0	0	0	0
17	6	0	0	0	0	0	0	0
18	7	0	0	0	0	0	0	0
19	8	0	0	.	0	0	0	0
20	9	0	.	.	0	0	.	.
21	10	0	.	.	.	.	.	.

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

Obs	BYR	name	no	mean_noff	std_noff	mean_ss	mean_oss	std_ss	std_oss	mean_dif	std_dif	corr_SS
1	2010	cr0	165	261	620	93.2	92.9	9.1	9.2	0.2	0.6	1.00
2	2011	cr0	168	323	692	94.5	94.2	9.0	9.0	0.3	0.5	1.00
3	2012	cr0	169	309	559	99.0	98.7	8.4	8.4	0.3	0.6	1.00
4	2013	cr0	122	436	725	97.7	97.5	9.3	9.4	0.2	0.6	1.00
5	2014	cr0	85	665	956	98.2	98.0	11.6	11.6	0.2	0.6	1.00
6	2015	cr0	71	736	899	101.8	101.7	10.4	10.4	0.1	0.6	1.00
7	2016	cr0	70	710	1011	100.0	100.0	9.4	9.4	0.0	0.8	1.00
8	2017	cr0	66	799	1106	103.7	103.8	11.3	11.2	-0.1	0.9	1.00
9	2018	cr0	52	873	1239	101.7	101.8	10.0	10.0	-0.1	1.1	0.99
10	2019	cr0	49	669	715	103.8	103.8	11.8	11.2	0.0	1.9	0.99
11	2020	cr0	23	276	300	103.3	103.1	8.5	7.6	0.2	3.0	0.94
12	2010	cr1	165	216	513	88.1	88.0	8.6	8.5	0.1	0.6	1.00
13	2011	cr1	168	262	564	92.1	92.0	9.3	9.3	0.1	0.6	1.00
14	2012	cr1	169	252	459	94.8	94.9	9.2	9.1	0.0	0.6	1.00
15	2013	cr1	122	358	598	95.3	95.3	9.0	8.9	0.1	0.7	1.00
16	2014	cr1	85	545	789	96.8	96.8	9.8	9.7	0.0	0.6	1.00
17	2015	cr1	71	598	735	100.5	100.4	9.5	9.5	0.1	0.7	1.00
18	2016	cr1	70	576	826	98.9	99.0	10.4	10.4	-0.1	1.0	1.00
19	2017	cr1	66	644	895	101.7	101.8	11.1	11.2	-0.1	1.2	0.99
20	2018	cr1	51	549	787	102.4	102.7	11.5	11.0	-0.3	1.9	0.99
21	2019	cr1	15	265	211	100.1	100.0	10.3	9.9	0.1	2.8	0.96
22	2010	cr2	165	154	378	88.6	88.7	8.3	8.1	-0.1	0.6	1.00
23	2011	cr2	168	188	408	92.4	92.4	9.4	9.3	0.0	0.7	1.00
24	2012	cr2	169	186	343	94.7	94.7	9.3	9.2	0.0	0.6	1.00
25	2013	cr2	122	266	447	95.1	95.3	8.8	8.6	-0.1	0.7	1.00
26	2014	cr2	84	411	590	96.9	97.0	10.0	9.8	-0.1	0.7	1.00
27	2015	cr2	71	447	572	99.8	99.8	9.1	9.1	0.1	0.6	1.00
28	2016	cr2	70	418	603	98.8	99.1	10.2	10.1	-0.3	1.3	0.99
29	2017	cr2	64	393	537	101.0	101.2	10.8	10.8	-0.1	1.3	0.99
30	2018	cr2	19	193	200	103.0	103.7	12.2	12.2	-0.7	2.2	0.98
31	2010	cr3	159	101	258	89.0	89.1	8.6	8.3	-0.1	0.7	1.00
32	2011	cr3	162	123	261	92.9	93.0	9.8	9.6	-0.1	0.7	1.00
33	2012	cr3	165	122	221	94.7	94.6	9.4	9.2	0.1	0.7	1.00
34	2013	cr3	116	181	296	95.7	95.8	8.4	8.3	-0.1	0.6	1.00
35	2014	cr3	84	259	367	97.2	97.2	9.9	9.8	0.0	0.7	1.00
36	2015	cr3	71	285	371	99.9	99.8	8.8	8.9	0.1	0.8	1.00

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

Obs	BYR	name	no	mean_noff	std_noff	mean_ss	mean_oss	std_ss	std_oss	mean_dif	std_dif	corr_SS
37	2016	cr3	61	240	338	99.8	99.9	9.6	9.4	-0.1	1.5	0.99
38	2017	cr3	19	148	132	99.5	99.6	12.1	12.1	-0.1	1.3	0.99
39	2010	cr	165	279	658	88.3	88.3	8.6	8.4	0.0	0.7	1.00
40	2011	cr	168	347	739	92.2	92.2	9.7	9.5	0.0	0.7	1.00
41	2012	cr	169	331	598	94.6	94.6	9.5	9.3	0.0	0.7	1.00
42	2013	cr	122	467	768	95.1	95.1	8.9	8.7	0.0	0.7	1.00
43	2014	cr	85	711	1016	96.9	97.0	10.0	10.0	0.0	0.6	1.00
44	2015	cr	71	786	953	100.1	99.9	9.2	9.3	0.2	0.8	1.00
45	2016	cr	70	755	1069	99.0	99.1	10.2	10.3	-0.2	1.3	0.99
46	2017	cr	66	847	1168	101.3	101.4	10.8	10.8	0.0	1.4	0.99
47	2018	cr	52	903	1277	101.7	101.9	11.1	10.7	-0.2	2.0	0.98
48	2019	cr	49	673	720	105.1	104.9	8.8	8.4	0.2	2.0	0.98
49	2020	cr	23	276	300	105.2	105.4	8.8	8.8	-0.3	2.0	0.97
50	2010	nrr0	165	247	588	97.0	96.8	8.3	8.3	0.2	0.6	1.00
51	2011	nrr0	168	303	649	97.9	97.7	9.2	9.2	0.2	0.7	1.00
52	2012	nrr0	169	293	530	101.1	100.9	8.9	8.9	0.2	0.7	1.00
53	2013	nrr0	122	412	683	99.9	99.6	9.3	9.3	0.3	0.7	1.00
54	2014	nrr0	85	628	906	99.7	99.7	12.1	12.2	0.0	0.7	1.00
55	2015	nrr0	71	699	859	102.2	102.1	10.8	10.8	0.2	0.9	1.00
56	2016	nrr0	70	674	964	100.2	100.3	9.3	9.3	-0.2	0.9	1.00
57	2017	nrr0	66	759	1056	102.3	102.4	11.0	10.9	-0.1	1.4	0.99
58	2018	nrr0	52	841	1204	99.1	99.1	10.0	9.7	0.0	1.1	0.99
59	2019	nrr0	50	707	762	100.4	100.2	11.8	11.4	0.2	1.8	0.99
60	2020	nrr0	35	376	472	100.1	100.6	9.4	8.2	-0.5	5.2	0.83
61	2010	nrr1	165	208	496	91.8	91.9	9.0	8.8	-0.1	0.7	1.00
62	2011	nrr1	168	252	544	94.7	94.8	10.3	10.2	-0.1	0.6	1.00
63	2012	nrr1	169	243	443	97.0	97.1	9.4	9.3	-0.1	0.7	1.00
64	2013	nrr1	122	346	576	97.1	97.4	8.1	8.1	-0.3	0.7	1.00
65	2014	nrr1	85	528	765	98.8	98.8	10.5	10.3	0.0	0.8	1.00
66	2015	nrr1	71	581	713	100.9	100.9	9.2	9.1	0.0	0.8	1.00
67	2016	nrr1	70	559	801	99.4	99.4	10.9	10.8	0.0	1.0	1.00
68	2017	nrr1	66	632	881	100.6	100.5	10.8	10.6	0.1	1.5	0.99
69	2018	nrr1	52	587	843	100.9	100.9	10.2	9.9	0.0	1.8	0.98
70	2019	nrr1	22	369	301	101.8	100.5	8.9	8.0	1.3	3.7	0.91
71	2010	nrr2	165	149	366	91.6	91.6	8.9	8.8	-0.1	0.7	1.00
72	2011	nrr2	168	182	396	94.0	94.0	10.8	10.8	-0.1	0.7	1.00

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

Obs	BYR	name	no	mean_noff	std_noff	mean_ss	mean_oss	std_ss	std_oss	mean_dif	std_dif	corr_SS
73	2012	nrr2	169	180	332	96.2	96.3	9.4	9.4	-0.1	0.8	1.00
74	2013	nrr2	122	258	434	95.4	95.6	8.8	8.8	-0.3	0.8	1.00
75	2014	nrr2	84	397	571	98.5	98.6	11.7	11.7	-0.1	0.7	1.00
76	2015	nrr2	71	434	555	99.3	99.4	9.6	9.6	-0.1	1.1	0.99
77	2016	nrr2	70	410	589	99.1	99.2	12.1	12.1	-0.1	1.3	0.99
78	2017	nrr2	65	422	586	99.6	99.4	10.8	10.8	0.2	1.9	0.98
79	2018	nrr2	31	248	308	99.0	99.0	13.2	12.9	0.0	2.9	0.98
80	2010	nrr3	158	98	250	91.1	91.0	9.9	10.1	0.1	0.8	1.00
81	2011	nrr3	160	120	255	94.3	94.2	11.8	12.1	0.1	0.8	1.00
82	2012	nrr3	165	118	214	96.5	96.4	9.9	10.2	0.1	0.9	1.00
83	2013	nrr3	114	178	288	96.2	96.4	8.8	9.0	-0.1	0.9	1.00
84	2014	nrr3	84	250	355	98.9	98.8	12.0	12.4	0.1	1.0	1.00
85	2015	nrr3	71	278	365	100.3	100.2	10.0	10.2	0.0	1.2	0.99
86	2016	nrr3	67	237	344	99.0	98.8	11.7	12.1	0.2	1.6	0.99
87	2017	nrr3	32	183	182	98.5	98.8	12.9	12.7	-0.3	3.3	0.97
88	2010	nrr	165	275	647	91.3	91.3	9.0	9.0	0.0	0.7	1.00
89	2011	nrr	168	341	725	94.2	94.2	10.8	10.8	0.0	0.6	1.00
90	2012	nrr	169	326	588	96.5	96.7	9.4	9.5	-0.2	0.7	1.00
91	2013	nrr	122	459	756	96.0	96.2	8.4	8.4	-0.2	0.7	1.00
92	2014	nrr	85	698	1001	98.7	98.7	11.3	11.3	0.0	0.8	1.00
93	2015	nrr	71	775	943	100.2	100.3	9.3	9.5	-0.1	1.0	0.99
94	2016	nrr	70	743	1054	99.2	99.2	11.4	11.5	0.0	1.2	0.99
95	2017	nrr	66	837	1157	100.2	100.0	10.5	10.5	0.1	2.0	0.98
96	2018	nrr	52	901	1283	100.2	100.2	10.8	10.6	0.0	2.0	0.98
97	2019	nrr	50	721	778	103.0	102.8	8.0	7.5	0.2	2.8	0.94
98	2020	nrr	35	376	472	102.6	102.2	7.3	7.2	0.4	1.8	0.97
99	2010	icf1	165	210	500	96.3	96.4	9.0	8.9	-0.2	0.6	1.00
100	2011	icf1	168	254	549	96.7	96.9	9.9	9.8	-0.2	0.6	1.00
101	2012	icf1	169	245	447	96.7	96.9	9.0	9.1	-0.3	0.6	1.00
102	2013	icf1	122	350	583	99.4	99.5	8.9	8.9	-0.1	0.6	1.00
103	2014	icf1	85	533	772	97.4	97.4	8.6	8.5	0.0	0.7	1.00
104	2015	icf1	71	587	720	99.0	99.2	10.5	10.5	-0.2	0.6	1.00
105	2016	icf1	70	564	808	98.1	98.1	7.9	8.0	0.0	0.7	1.00
106	2017	icf1	66	638	889	99.1	99.3	9.6	9.6	-0.2	1.2	0.99
107	2018	icf1	52	590	847	101.5	101.3	9.5	9.5	0.2	1.7	0.98
108	2019	icf1	22	358	296	98.5	99.7	7.7	6.5	-1.1	3.4	0.90

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

Obs	BYR	name	no	mean_noff	std_noff	mean_ss	mean_oss	std_ss	std_oss	mean_dif	std_dif	corr_SS
109	2010	icf2	165	151	370	97.2	97.5	10.2	10.3	-0.3	0.5	1.00
110	2011	icf2	168	184	399	97.7	98.0	11.1	11.3	-0.3	0.6	1.00
111	2012	icf2	169	182	335	97.1	97.4	10.3	10.7	-0.3	0.7	1.00
112	2013	icf2	122	261	439	100.4	100.7	10.1	10.2	-0.3	0.7	1.00
113	2014	icf2	84	401	577	97.4	97.5	11.0	11.1	-0.1	0.6	1.00
114	2015	icf2	71	439	561	99.7	99.9	11.7	12.0	-0.3	0.9	1.00
115	2016	icf2	70	414	596	98.0	98.1	9.3	9.4	-0.2	0.9	1.00
116	2017	icf2	65	425	589	99.7	100.1	10.6	10.6	-0.4	1.5	0.99
117	2018	icf2	28	255	309	103.9	103.8	9.5	8.9	0.1	2.3	0.97
118	2010	icf3	159	99	252	97.3	97.7	10.6	11.0	-0.5	0.7	1.00
119	2011	icf3	160	122	258	97.5	97.9	11.4	11.7	-0.4	0.7	1.00
120	2012	icf3	165	120	218	96.3	96.8	10.4	10.8	-0.5	0.7	1.00
121	2013	icf3	115	179	291	100.3	100.8	10.8	11.1	-0.5	0.8	1.00
122	2014	icf3	84	254	360	97.6	98.0	11.3	11.5	-0.4	0.9	1.00
123	2015	icf3	71	282	369	98.9	99.2	12.2	12.6	-0.3	1.1	1.00
124	2016	icf3	67	240	349	98.2	98.7	9.7	9.8	-0.5	1.2	0.99
125	2017	icf3	31	179	178	100.0	99.7	10.5	10.0	0.4	2.1	0.98
126	2010	icf	165	218	519	96.7	97.1	9.8	10.1	-0.4	0.6	1.00
127	2011	icf	168	265	571	97.1	97.4	10.7	10.9	-0.3	0.6	1.00
128	2012	icf	169	256	465	96.6	97.0	9.7	9.9	-0.4	0.7	1.00
129	2013	icf	122	364	606	100.1	100.4	9.8	9.9	-0.3	0.7	1.00
130	2014	icf	85	554	800	97.5	97.6	10.1	10.2	-0.2	0.7	1.00
131	2015	icf	71	610	749	99.1	99.4	11.3	11.5	-0.3	0.7	1.00
132	2016	icf	70	585	838	98.1	98.3	8.7	8.9	-0.2	0.9	1.00
133	2017	icf	66	657	917	99.5	99.7	10.3	10.2	-0.2	1.4	0.99
134	2018	icf	52	596	855	101.6	101.1	9.5	9.4	0.5	2.0	0.98
135	2019	icf	22	358	296	99.2	100.3	8.3	7.8	-1.1	2.9	0.94
136	2010	ifl0	165	237	565	96.1	95.9	10.3	10.3	0.3	0.6	1.00
137	2011	ifl0	168	291	624	97.2	97.0	9.2	9.2	0.2	0.7	1.00
138	2012	ifl0	169	282	512	100.9	100.7	8.7	8.6	0.2	0.7	1.00
139	2013	ifl0	122	397	660	98.9	98.6	9.6	9.6	0.2	0.6	1.00
140	2014	ifl0	85	603	869	99.1	99.1	12.2	12.2	0.0	0.7	1.00
141	2015	ifl0	71	675	829	102.0	101.9	11.5	11.5	0.1	0.9	1.00
142	2016	ifl0	70	649	926	100.2	100.3	10.5	10.6	-0.1	0.8	1.00
143	2017	ifl0	66	734	1022	102.5	102.6	10.9	10.9	-0.1	1.1	0.99
144	2018	ifl0	52	815	1169	100.5	100.6	11.3	10.9	-0.1	1.2	0.99

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

Obs	BYR	name	no	mean_noff	std_noff	mean_ss	mean_oss	std_ss	std_oss	mean_dif	std_dif	corr_SS
145	2019	ifl0	50	689	741	101.7	101.6	12.3	11.8	0.1	1.8	0.99
146	2020	ifl0	35	372	465	101.2	101.6	9.2	7.9	-0.4	4.6	0.86
147	2010	ifl1	165	209	498	91.0	91.1	9.3	9.2	-0.1	0.7	1.00
148	2011	ifl1	168	253	545	94.4	94.5	9.6	9.5	-0.1	0.6	1.00
149	2012	ifl1	169	244	445	96.0	96.2	9.6	9.6	-0.2	0.7	1.00
150	2013	ifl1	122	348	580	96.9	97.2	9.3	9.2	-0.3	0.7	1.00
151	2014	ifl1	85	530	768	97.0	97.1	9.2	9.1	-0.1	0.8	1.00
152	2015	ifl1	71	584	717	100.4	100.5	10.3	10.3	-0.1	0.8	1.00
153	2016	ifl1	70	560	803	97.8	97.9	10.7	10.5	-0.1	1.1	0.99
154	2017	ifl1	66	635	887	100.4	100.5	11.0	11.1	-0.1	1.5	0.99
155	2018	ifl1	52	592	849	101.2	100.9	11.1	10.5	0.2	2.2	0.98
156	2019	ifl1	22	374	304	101.3	100.7	8.1	8.4	0.6	2.7	0.95
157	2010	ifl2	165	150	368	92.3	92.5	9.0	8.9	-0.2	0.7	1.00
158	2011	ifl2	168	184	398	94.8	95.1	9.7	9.7	-0.3	0.6	1.00
159	2012	ifl2	169	181	334	96.2	96.5	9.7	9.8	-0.3	0.7	1.00
160	2013	ifl2	122	260	437	96.9	97.3	9.2	9.2	-0.4	0.8	1.00
161	2014	ifl2	84	399	575	97.3	97.5	9.4	9.5	-0.2	0.8	1.00
162	2015	ifl2	71	437	558	99.7	99.9	9.3	9.5	-0.2	1.0	0.99
163	2016	ifl2	70	412	593	98.1	98.5	10.2	10.2	-0.4	1.2	0.99
164	2017	ifl2	65	426	591	100.0	100.1	10.3	10.5	-0.2	1.8	0.98
165	2018	ifl2	31	251	310	101.1	100.8	10.2	10.5	0.3	2.2	0.98
166	2010	ifl3	159	98	251	92.5	92.8	9.6	9.6	-0.3	0.7	1.00
167	2011	ifl3	160	121	257	95.2	95.4	9.9	10.0	-0.2	0.7	1.00
168	2012	ifl3	165	119	217	96.1	96.5	9.9	10.0	-0.4	0.7	1.00
169	2013	ifl3	115	178	290	97.3	97.8	9.0	9.2	-0.5	0.8	1.00
170	2014	ifl3	84	253	359	97.6	97.9	9.6	9.8	-0.3	0.9	1.00
171	2015	ifl3	71	281	368	99.9	100.1	9.4	9.6	-0.2	1.1	0.99
172	2016	ifl3	67	241	349	98.3	98.4	10.2	10.4	-0.1	1.5	0.99
173	2017	ifl3	32	186	185	99.6	99.3	12.3	11.9	0.3	2.7	0.98
174	2010	ifl	165	272	641	91.8	92.0	9.4	9.4	-0.2	0.7	1.00
175	2011	ifl	168	337	719	94.5	94.7	9.9	10.0	-0.2	0.6	1.00
176	2012	ifl	169	323	584	96.0	96.3	9.9	9.9	-0.3	0.7	1.00
177	2013	ifl	122	455	750	96.9	97.3	9.2	9.3	-0.4	0.7	1.00
178	2014	ifl	85	692	992	97.3	97.5	9.4	9.6	-0.2	0.8	1.00
179	2015	ifl	71	768	933	100.0	100.3	9.8	9.9	-0.3	0.9	1.00
180	2016	ifl	70	736	1043	98.1	98.2	10.4	10.4	-0.2	1.2	0.99

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

Obs	BYR	name	no	mean_noff	std_noff	mean_ss	mean_oss	std_ss	std_oss	mean_dif	std_dif	corr_SS
181	2017	ifl	66	830	1147	100.2	100.3	10.5	10.5	-0.1	1.9	0.98
182	2018	ifl	52	889	1268	100.9	100.7	10.5	10.2	0.2	2.1	0.98
183	2019	ifl	50	704	758	104.3	104.3	7.7	7.6	0.0	2.5	0.95
184	2020	ifl	35	372	466	104.5	104.2	6.9	7.0	0.3	1.5	0.98
185	2010	ais0	165	243	578	96.9	96.7	9.1	9.1	0.2	0.6	1.00
186	2011	ais0	168	297	636	98.1	97.9	9.2	9.2	0.2	0.6	1.00
187	2012	ais0	169	287	520	101.1	100.9	8.7	8.6	0.1	0.6	1.00
188	2013	ais0	122	405	671	99.9	99.7	9.0	9.0	0.2	0.6	1.00
189	2014	ais0	85	617	890	99.1	99.1	12.1	12.1	0.0	0.6	1.00
190	2015	ais0	71	689	845	101.9	101.8	10.9	10.9	0.0	0.7	1.00
191	2016	ais0	70	663	947	99.1	99.1	9.1	9.1	0.0	0.8	1.00
192	2017	ais0	66	747	1038	101.6	101.6	11.4	11.3	0.0	1.1	0.99
193	2018	ais0	52	830	1187	99.5	99.4	10.0	9.8	0.1	1.4	0.99
194	2019	ais0	50	705	759	99.5	99.6	11.1	10.8	0.0	1.6	0.99
195	2020	ais0	35	377	472	99.1	99.3	8.9	7.9	-0.2	4.7	0.85
196	2010	ais1	165	206	491	91.8	91.8	9.2	9.1	-0.1	0.6	1.00
197	2011	ais1	168	249	539	95.2	95.3	9.5	9.4	-0.1	0.6	1.00
198	2012	ais1	169	241	440	96.8	96.9	9.3	9.3	-0.2	0.7	1.00
199	2013	ais1	122	343	572	97.3	97.4	9.2	9.0	-0.1	0.6	1.00
200	2014	ais1	85	524	759	97.7	97.8	10.7	10.6	-0.1	0.7	1.00
201	2015	ais1	71	577	708	100.9	100.8	9.8	9.6	0.0	0.7	1.00
202	2016	ais1	70	554	794	97.5	97.5	11.0	10.9	0.0	0.9	1.00
203	2017	ais1	66	627	875	100.0	100.0	11.8	11.9	0.0	1.1	1.00
204	2018	ais1	52	581	835	100.1	100.2	11.7	11.1	-0.1	2.0	0.99
205	2019	ais1	22	345	291	100.4	100.5	9.7	8.4	0.0	3.5	0.93
206	2010	ais2	165	147	363	93.5	93.5	8.9	8.8	-0.1	0.6	1.00
207	2011	ais2	167	182	393	96.1	96.2	9.8	9.8	-0.1	0.6	1.00
208	2012	ais2	169	179	329	97.3	97.4	9.4	9.4	-0.1	0.6	1.00
209	2013	ais2	121	258	433	97.2	97.3	9.0	9.0	-0.1	0.7	1.00
210	2014	ais2	84	394	567	98.4	98.5	10.6	10.6	-0.1	0.7	1.00
211	2015	ais2	71	430	551	99.6	99.7	9.2	9.3	-0.1	0.8	1.00
212	2016	ais2	70	406	585	98.3	98.3	10.3	10.4	0.0	1.2	0.99
213	2017	ais2	65	417	579	99.1	99.1	10.4	10.5	0.1	1.6	0.99
214	2018	ais2	28	247	301	97.8	98.2	11.4	11.8	-0.4	2.7	0.97
215	2010	ais3	158	97	248	93.3	93.4	9.6	9.7	-0.1	0.7	1.00
216	2011	ais3	160	119	253	95.8	95.9	10.7	10.8	-0.1	0.7	1.00

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

Obs	BYR	name	no	mean_noff	std_noff	mean_ss	mean_oss	std_ss	std_oss	mean_dif	std_dif	corr_SS
217	2012	ais3	164	118	214	97.0	97.2	9.6	9.7	-0.2	0.8	1.00
218	2013	ais3	114	176	285	97.9	98.0	8.9	8.9	-0.1	0.7	1.00
219	2014	ais3	84	248	353	98.7	98.8	11.0	11.2	-0.1	0.8	1.00
220	2015	ais3	71	277	363	100.2	100.3	9.3	9.4	-0.1	1.0	0.99
221	2016	ais3	67	235	342	98.5	98.4	10.1	10.5	0.1	1.6	0.99
222	2017	ais3	30	178	173	98.5	98.6	12.2	11.8	-0.1	3.1	0.97
223	2010	ais	165	273	644	92.8	92.9	9.1	9.0	0.0	0.6	1.00
224	2011	ais	168	339	721	95.7	95.7	10.0	10.0	-0.1	0.6	1.00
225	2012	ais	169	325	586	97.2	97.3	9.3	9.4	-0.1	0.6	1.00
226	2013	ais	122	457	752	97.3	97.4	9.0	8.9	-0.1	0.6	1.00
227	2014	ais	85	696	997	98.4	98.5	10.7	10.8	-0.1	0.7	1.00
228	2015	ais	71	773	938	100.4	100.5	9.2	9.3	-0.1	0.8	1.00
229	2016	ais	70	741	1049	98.3	98.2	10.3	10.4	0.1	1.2	0.99
230	2017	ais	66	833	1151	99.6	99.5	10.6	10.5	0.0	1.6	0.99
231	2018	ais	52	897	1276	99.2	99.4	10.3	10.0	-0.2	1.8	0.98
232	2019	ais	50	719	774	102.5	102.5	7.6	6.9	0.0	2.2	0.96
233	2020	ais	35	377	473	101.2	101.2	7.7	7.8	0.0	2.8	0.94
234	2010	hst0	75	167	261	100.2	100.6	9.3	9.2	-0.4	0.8	1.00
235	2011	hst0	103	200	363	96.4	96.8	9.4	9.5	-0.4	0.7	1.00
236	2012	hst0	85	192	258	100.1	100.4	11.2	11.4	-0.3	0.7	1.00
237	2013	hst0	71	259	382	100.3	100.4	9.9	9.9	-0.1	0.7	1.00
238	2014	hst0	64	302	379	98.1	98.5	9.7	9.8	-0.4	0.9	1.00
239	2015	hst0	55	293	349	99.1	99.5	10.1	10.1	-0.3	0.9	1.00
240	2016	hst0	60	291	386	102.7	103.3	8.2	8.3	-0.6	1.1	0.99
241	2017	hst0	56	327	398	101.4	101.5	8.4	8.4	-0.1	1.7	0.98
242	2018	hst0	45	381	534	104.0	103.6	9.8	10.2	0.4	2.1	0.98
243	2019	hst0	41	283	317	103.4	104.2	9.3	9.2	-0.9	3.3	0.94
244	2020	hst0	22	180	156	103.5	102.8	8.9	8.9	0.7	5.4	0.82
245	2010	hst1	74	148	226	100.3	100.4	8.7	8.6	-0.2	0.7	1.00
246	2011	hst1	101	176	316	96.4	96.6	9.4	9.3	-0.2	0.6	1.00
247	2012	hst1	84	170	226	97.7	98.0	10.0	10.1	-0.2	0.8	1.00
248	2013	hst1	71	228	334	100.0	100.2	10.3	10.3	-0.2	1.0	1.00
249	2014	hst1	64	272	336	97.3	97.4	8.7	8.4	-0.1	1.0	0.99
250	2015	hst1	54	265	309	99.2	99.4	9.6	9.5	-0.1	1.5	0.99
251	2016	hst1	59	255	331	101.6	101.8	8.2	8.4	-0.2	1.1	0.99
252	2017	hst1	52	301	349	101.3	101.3	8.3	8.6	0.0	1.5	0.99

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

Obs	BYR	name	no	mean_noff	std_noff	mean_ss	mean_oss	std_ss	std_oss	mean_dif	std_dif	corr_SS
253	2018	hst1	35	328	381	102.7	102.9	10.2	10.0	-0.3	2.1	0.98
254	2019	hst1	11	176	140	107.3	105.2	9.0	8.8	2.1	5.5	0.81
255	2010	hst2	71	102	160	102.6	103.3	8.5	8.4	-0.7	0.9	0.99
256	2011	hst2	89	136	230	98.2	98.8	11.7	11.6	-0.6	0.8	1.00
257	2012	hst2	83	123	164	97.1	97.8	11.9	12.1	-0.7	0.9	1.00
258	2013	hst2	68	172	250	102.2	102.5	10.2	10.1	-0.3	1.0	0.99
259	2014	hst2	62	201	241	98.5	99.2	11.5	11.5	-0.7	0.9	1.00
260	2015	hst2	52	200	240	99.0	99.3	9.6	9.5	-0.3	1.2	0.99
261	2016	hst2	53	196	235	100.4	101.0	10.8	11.1	-0.6	1.4	0.99
262	2017	hst2	47	188	204	102.1	102.2	10.2	10.5	-0.1	2.2	0.98
263	2018	hst2	15	124	109	102.3	102.6	8.2	9.2	-0.3	3.7	0.92
264	2010	hst3	61	69	104	103.8	104.8	9.1	9.1	-1.0	0.9	1.00
265	2011	hst3	80	91	146	98.4	99.1	13.1	13.2	-0.7	0.8	1.00
266	2012	hst3	80	77	98	97.7	98.8	12.5	12.7	-1.1	1.1	1.00
267	2013	hst3	66	110	156	101.9	102.5	11.1	11.1	-0.6	1.1	1.00
268	2014	hst3	62	120	139	98.9	100.0	11.3	11.4	-1.1	1.1	1.00
269	2015	hst3	44	138	155	99.0	99.1	8.0	8.3	-0.2	1.6	0.98
270	2016	hst3	37	128	128	101.9	102.7	11.2	10.8	-0.8	2.6	0.97
271	2017	hst3	10	107	47	105.6	106.3	8.2	7.0	-0.7	4.1	0.87
272	2010	hst	75	202	308	101.8	102.5	8.1	7.9	-0.7	0.8	1.00
273	2011	hst	104	241	434	97.6	98.2	10.4	10.5	-0.6	0.7	1.00
274	2012	hst	85	233	310	97.6	98.2	11.0	11.2	-0.6	0.9	1.00
275	2013	hst	71	314	454	101.3	101.7	10.1	10.2	-0.4	0.9	1.00
276	2014	hst	65	363	451	98.2	98.9	9.8	9.9	-0.7	0.9	1.00
277	2015	hst	55	353	411	99.3	99.6	8.7	8.5	-0.3	1.1	0.99
278	2016	hst	62	332	448	101.0	101.5	9.3	9.2	-0.5	1.5	0.99
279	2017	hst	56	380	460	101.2	101.2	8.6	8.9	0.0	2.2	0.97
280	2018	hst	45	423	587	101.1	101.3	8.6	8.9	-0.2	2.2	0.97
281	2019	hst	41	290	327	103.3	103.9	7.2	6.7	-0.6	2.8	0.92
282	2020	hst	22	180	156	103.2	102.7	9.4	9.9	0.5	2.6	0.96
283	2010	fert	165	218	519	92.0	92.1	9.3	9.4	-0.1	0.6	1.00
284	2011	fert	168	265	571	94.6	94.8	9.9	9.8	-0.2	0.6	1.00
285	2012	fert	169	256	465	96.4	96.7	9.9	9.9	-0.2	0.6	1.00
286	2013	fert	122	364	606	97.1	97.4	9.1	9.2	-0.3	0.7	1.00
287	2014	fert	85	554	800	97.4	97.5	9.7	9.7	-0.2	0.7	1.00
288	2015	fert	71	610	749	100.3	100.5	10.0	10.2	-0.2	0.8	1.00

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

Obs	BYR	name	no	mean_noff	std_noff	mean_ss	mean_oss	std_ss	std_oss	mean_dif	std_dif	corr_SS
289	2016	fert	70	585	838	98.1	98.2	10.3	10.4	-0.2	1.1	0.99
290	2017	fert	66	657	917	100.3	100.4	10.9	11.0	-0.1	1.7	0.99
291	2018	fert	52	596	855	100.5	100.5	10.7	10.4	0.0	1.7	0.99
292	2019	fert	22	358	296	101.6	101.5	8.8	8.9	0.1	2.1	0.97

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

Obs	diff	d_cr	d_nrr	d_icf	d_ifl	d_ais	d_hst	d_fert
1	-8	.	.	.	.	1	.	.
2	-7	.	1	1	1	.	1	.
3	-6	.	2	.	1	1	.	.
4	-5	1	3	1	3	4	3	1
5	-4	5	6	8	3	2	8	1
6	-3	12	6	6	14	12	27	10
7	-2	41	50	31	59	35	75	44
8	-1	212	218	329	291	229	234	250
9	0	515	506	481	494	547	220	531
10	1	203	193	102	127	173	64	120
11	2	34	39	21	33	27	27	23
12	3	11	20	6	19	15	9	6
13	4	5	5	3	7	5	6	3
14	5	1	3	1	.	.	5	1
15	6	.	.	.	1	2	1	.
16	7	.	1	.	.	.	1	.

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

Obs	diff	p_cr	p_nrr	p_icf	p_ifl	p_ais	p_hst	p_fert
1	-8	.	.	.	.	0	.	.
2	-7	.	0	0	0	.	0	.
3	-6	.	0	.	0	0	.	.
4	-5	0	0	0	0	0	0	0
5	-4	0	1	1	0	0	1	0
6	-3	1	1	1	1	1	4	1
7	-2	4	5	3	6	3	11	4
8	-1	20	21	33	28	22	34	25
9	0	50	48	49	47	52	32	54
10	1	20	18	10	12	16	9	12
11	2	3	4	2	3	3	4	2
12	3	1	2	1	2	1	1	1
13	4	0	0	0	1	0	1	0
14	5	0	0	0	.	.	1	0
15	6	.	.	.	0	0	0	.
16	7	.	0	.	.	.	0	.

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

Obs	BYR	name	no	mean_noff	std_noff	mean_ss	mean_oss	std_ss	std_oss	mean_dif	std_dif	corr_SS
1	2019	cr0	25	.	.	101.8	101.8	9.7	9.6	0.0	0.7	1.00
2	2020	cr0	24	.	.	103.3	103.4	7.8	7.7	-0.2	0.9	0.99
3	2021	cr0	71	.	.	103.9	103.9	8.2	7.8	0.0	1.1	0.99
4	2022	cr0	73	.	.	103.2	103.4	7.7	7.5	-0.2	1.6	0.98
5	2023	cr0	51	.	.	103.9	104.1	5.8	5.4	-0.2	1.2	0.98
6	2019	cr1	34	.	.	102.5	102.5	8.3	8.6	0.0	1.0	0.99
7	2020	cr1	72	.	.	105.4	105.5	7.4	7.5	-0.1	1.8	0.97
8	2021	cr1	72	.	.	107.4	107.3	8.0	7.8	0.1	1.4	0.98
9	2022	cr1	73	.	.	106.2	106.3	7.9	7.9	-0.1	1.6	0.98
10	2023	cr1	51	.	.	107.8	108.0	6.7	6.4	-0.3	1.3	0.98
11	2019	cr2	77	.	.	103.4	103.3	8.6	8.4	0.1	1.7	0.98
12	2020	cr2	74	.	.	104.9	105.1	7.5	7.5	-0.2	1.7	0.98
13	2021	cr2	72	.	.	107.5	107.4	7.5	7.2	0.1	1.3	0.99
14	2022	cr2	73	.	.	106.0	105.9	7.6	7.6	0.0	1.4	0.98
15	2023	cr2	51	.	.	107.6	107.8	6.7	6.4	-0.2	1.4	0.98
16	2019	cr3	77	.	.	103.4	103.3	8.2	8.0	0.2	1.6	0.98
17	2020	cr3	74	.	.	104.5	104.8	7.3	7.3	-0.2	1.6	0.97
18	2021	cr3	72	.	.	107.7	107.3	7.2	7.0	0.3	1.4	0.98
19	2022	cr3	73	.	.	105.7	105.6	7.3	7.2	0.2	1.4	0.98
20	2023	cr3	51	.	.	107.6	107.7	6.8	6.5	-0.1	1.4	0.98
21	2019	cr	25	.	.	100.8	100.9	8.6	8.8	-0.1	0.9	0.99
22	2020	cr	24	.	.	105.0	105.4	7.1	7.0	-0.4	1.6	0.97
23	2021	cr	71	.	.	107.8	107.7	7.5	7.4	0.2	1.4	0.98
24	2022	cr	73	.	.	106.1	106.1	7.7	7.6	0.0	1.5	0.98
25	2023	cr	51	.	.	107.9	108.0	6.9	6.6	-0.1	1.3	0.98
26	2019	nrr0	25	.	.	101.4	101.2	10.7	10.5	0.2	1.0	1.00
27	2020	nrr0	22	.	.	101.3	101.0	7.8	8.1	0.3	1.2	0.99
28	2021	nrr0	60	.	.	100.8	100.7	8.7	8.4	0.1	1.2	0.99
29	2022	nrr0	73	.	.	99.2	99.4	7.8	7.2	-0.1	2.4	0.95
30	2023	nrr0	51	.	.	100.2	100.0	6.9	6.8	0.2	1.6	0.97
31	2019	nrr1	28	.	.	100.1	99.7	8.6	8.6	0.4	0.8	1.00
32	2020	nrr1	59	.	.	102.7	102.5	6.4	6.0	0.2	1.8	0.96
33	2021	nrr1	72	.	.	104.8	104.6	8.2	7.8	0.2	2.0	0.97
34	2022	nrr1	73	.	.	102.4	102.5	7.0	6.8	-0.1	1.6	0.97
35	2023	nrr1	51	.	.	104.8	104.4	6.9	6.8	0.4	1.5	0.98
36	2019	nrr2	67	.	.	102.2	101.8	8.6	8.5	0.4	2.1	0.97

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

Obs	BYR	name	no	mean_noff	std_noff	mean_ss	mean_oss	std_ss	std_oss	mean_dif	std_dif	corr_SS
37	2020	nrr2	74	.	.	102.5	102.4	7.7	7.5	0.2	1.8	0.97
38	2021	nrr2	72	.	.	105.3	105.3	7.2	7.3	0.1	1.7	0.97
39	2022	nrr2	73	.	.	103.2	103.2	7.5	7.5	0.1	1.6	0.98
40	2023	nrr2	51	.	.	105.0	104.8	7.5	7.5	0.2	1.5	0.98
41	2019	nrr3	77	.	.	102.0	102.0	8.4	8.2	0.1	2.6	0.95
42	2020	nrr3	74	.	.	102.6	102.2	7.0	7.1	0.3	1.7	0.97
43	2021	nrr3	72	.	.	105.1	105.7	7.6	7.3	-0.6	2.3	0.96
44	2022	nrr3	73	.	.	103.1	102.9	7.2	7.0	0.2	1.7	0.97
45	2023	nrr3	51	.	.	104.8	104.9	7.0	7.3	-0.1	1.8	0.97
46	2019	nrr	25	.	.	99.7	99.3	8.6	8.7	0.4	1.0	0.99
47	2020	nrr	22	.	.	101.4	101.9	4.7	4.6	-0.5	1.2	0.97
48	2021	nrr	60	.	.	104.8	105.1	7.7	7.4	-0.3	2.0	0.97
49	2022	nrr	73	.	.	103.0	102.9	7.2	7.0	0.0	1.5	0.98
50	2023	nrr	51	.	.	105.0	104.8	6.9	7.1	0.2	1.5	0.98
51	2019	icf1	28	.	.	101.4	101.8	8.6	8.4	-0.4	0.9	0.99
52	2020	icf1	63	.	.	104.4	104.4	7.5	7.5	0.0	1.1	0.99
53	2021	icf1	72	.	.	103.2	103.5	6.0	5.9	-0.3	1.9	0.95
54	2022	icf1	73	.	.	104.7	104.8	7.6	7.4	-0.1	1.3	0.99
55	2023	icf1	51	.	.	103.0	103.6	6.9	6.7	-0.6	1.3	0.98
56	2019	icf2	69	.	.	100.8	101.4	8.3	8.5	-0.6	1.9	0.97
57	2020	icf2	74	.	.	103.6	103.5	9.1	9.0	0.1	1.5	0.99
58	2021	icf2	72	.	.	103.0	103.3	6.7	6.6	-0.3	1.9	0.96
59	2022	icf2	73	.	.	104.8	104.7	8.0	7.9	0.0	1.3	0.99
60	2023	icf2	51	.	.	102.4	102.6	7.3	7.4	-0.2	1.4	0.98
61	2019	icf3	77	.	.	100.9	101.4	8.5	8.5	-0.5	2.1	0.97
62	2020	icf3	74	.	.	103.8	103.9	9.1	9.1	-0.1	1.3	0.99
63	2021	icf3	72	.	.	103.7	103.7	6.8	6.6	0.0	1.8	0.96
64	2022	icf3	73	.	.	104.6	104.7	8.3	8.3	-0.1	1.4	0.99
65	2023	icf3	51	.	.	103.4	103.7	7.0	7.2	-0.3	1.5	0.98
66	2019	icf	28	.	.	101.0	101.5	8.9	9.1	-0.5	1.0	0.99
67	2020	icf	63	.	.	104.2	104.1	8.3	8.3	0.0	1.2	0.99
68	2021	icf	72	.	.	103.3	103.5	6.4	6.2	-0.2	1.8	0.96
69	2022	icf	73	.	.	104.6	104.7	7.9	7.8	-0.1	1.3	0.99
70	2023	icf	51	.	.	103.0	103.4	7.0	7.0	-0.4	1.3	0.98
71	2019	ifl0	25	.	.	102.7	102.6	10.2	10.1	0.2	0.7	1.00
72	2020	ifl0	22	.	.	103.1	103.2	8.3	8.2	-0.1	1.1	0.99

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

Obs	BYR	name	no	mean_noff	std_noff	mean_ss	mean_oss	std_ss	std_oss	mean_dif	std_dif	corr_SS
73	2021	ifl0	60	.	.	101.3	101.4	9.0	8.7	-0.1	1.1	0.99
74	2022	ifl0	73	.	.	101.0	101.2	8.2	7.6	-0.2	2.3	0.96
75	2023	ifl0	51	.	.	101.5	101.5	6.4	6.4	0.0	1.3	0.98
76	2019	ifl1	28	.	.	101.5	101.3	8.8	8.7	0.2	0.8	1.00
77	2020	ifl1	59	.	.	103.9	103.9	7.1	6.5	0.1	1.8	0.97
78	2021	ifl1	72	.	.	105.8	105.8	7.6	7.3	0.0	1.7	0.97
79	2022	ifl1	73	.	.	105.3	105.4	7.5	7.4	-0.1	1.7	0.97
80	2023	ifl1	51	.	.	105.5	105.3	6.3	6.1	0.2	1.5	0.97
81	2019	ifl2	67	.	.	103.3	103.4	8.1	8.0	-0.1	1.8	0.98
82	2020	ifl2	74	.	.	103.7	103.7	7.3	7.1	0.0	1.6	0.98
83	2021	ifl2	72	.	.	105.9	106.1	7.0	6.7	-0.2	1.5	0.98
84	2022	ifl2	73	.	.	105.1	105.0	7.0	6.9	0.1	1.5	0.98
85	2023	ifl2	51	.	.	105.4	105.4	6.3	6.3	0.0	1.4	0.98
86	2019	ifl3	77	.	.	103.2	103.2	7.8	7.6	0.0	2.0	0.97
87	2020	ifl3	74	.	.	103.4	103.4	7.2	7.0	0.0	1.6	0.98
88	2021	ifl3	72	.	.	105.7	105.9	7.0	6.9	-0.3	1.7	0.97
89	2022	ifl3	73	.	.	104.8	104.7	7.1	6.9	0.0	1.5	0.98
90	2023	ifl3	51	.	.	105.4	105.5	6.3	6.5	-0.1	1.4	0.98
91	2019	ifl	25	.	.	101.0	101.0	8.3	8.1	0.0	1.0	0.99
92	2020	ifl	22	.	.	102.5	103.1	7.5	7.3	-0.5	1.2	0.99
93	2021	ifl	60	.	.	105.7	105.9	7.2	7.0	-0.2	1.8	0.97
94	2022	ifl	73	.	.	105.2	105.1	7.3	7.2	0.1	1.5	0.98
95	2023	ifl	51	.	.	105.5	105.6	6.3	6.4	-0.1	1.4	0.97
96	2019	ais0	25	.	.	100.7	100.6	9.6	9.4	0.1	1.1	0.99
97	2020	ais0	22	.	.	101.5	101.3	8.0	7.9	0.2	1.2	0.99
98	2021	ais0	60	.	.	100.4	100.6	8.5	8.2	-0.2	1.3	0.99
99	2022	ais0	73	.	.	98.6	98.7	8.4	8.0	-0.2	2.3	0.96
100	2023	ais0	51	.	.	100.1	100.1	7.2	7.0	0.0	1.3	0.98
101	2019	ais1	28	.	.	100.4	100.1	8.9	8.7	0.2	0.7	1.00
102	2020	ais1	63	.	.	102.4	102.3	7.4	7.0	0.2	2.0	0.96
103	2021	ais1	72	.	.	104.9	105.1	8.6	8.1	-0.3	1.9	0.98
104	2022	ais1	73	.	.	102.5	102.5	8.1	8.1	-0.1	1.7	0.98
105	2023	ais1	51	.	.	104.0	104.0	7.1	7.0	0.0	1.4	0.98
106	2019	ais2	69	.	.	101.8	101.8	8.0	7.7	0.1	1.7	0.98
107	2020	ais2	74	.	.	101.5	101.4	7.8	7.4	0.1	2.2	0.96
108	2021	ais2	72	.	.	105.0	105.2	7.1	7.0	-0.2	1.5	0.98

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

Obs	BYR	name	no	mean_noff	std_noff	mean_ss	mean_oss	std_ss	std_oss	mean_dif	std_dif	corr_SS
109	2022	ais2	73	.	.	101.8	101.6	7.5	7.6	0.2	1.6	0.98
110	2023	ais2	51	.	.	103.3	103.3	6.5	6.5	0.1	1.4	0.98
111	2019	ais3	77	.	.	101.4	101.3	7.5	7.0	0.1	1.8	0.97
112	2020	ais3	74	.	.	100.8	100.6	7.6	7.3	0.1	2.3	0.95
113	2021	ais3	72	.	.	104.3	104.5	7.2	7.1	-0.2	1.8	0.97
114	2022	ais3	73	.	.	100.6	100.2	7.3	7.4	0.4	1.7	0.97
115	2023	ais3	51	.	.	102.6	102.5	6.7	6.9	0.1	1.6	0.97
116	2019	ais	25	.	.	100.1	100.0	8.5	8.2	0.1	1.1	0.99
117	2020	ais	22	.	.	101.3	101.4	7.0	6.8	-0.1	1.2	0.99
118	2021	ais	60	.	.	104.3	104.6	7.3	7.1	-0.4	1.7	0.97
119	2022	ais	73	.	.	101.7	101.5	7.5	7.7	0.2	1.7	0.98
120	2023	ais	51	.	.	103.4	103.4	6.7	6.8	0.1	1.5	0.98
121	2019	hst0	28	.	.	102.0	102.3	7.6	8.2	-0.3	1.6	0.98
122	2020	hst0	23	.	.	105.1	105.3	8.1	7.9	-0.3	1.4	0.98
123	2021	hst0	65	.	.	103.8	104.5	6.3	5.9	-0.7	1.9	0.95
124	2022	hst0	73	.	.	103.5	103.2	7.7	7.9	0.3	2.1	0.96
125	2023	hst0	51	.	.	103.5	104.3	8.0	7.5	-0.8	1.5	0.98
126	2019	hst1	33	.	.	102.1	102.2	8.3	8.2	-0.1	1.6	0.98
127	2020	hst1	72	.	.	104.6	104.3	7.6	7.4	0.3	1.9	0.97
128	2021	hst1	72	.	.	105.2	105.7	6.3	6.0	-0.5	2.2	0.94
129	2022	hst1	73	.	.	103.3	103.0	7.3	7.2	0.3	1.5	0.98
130	2023	hst1	51	.	.	103.4	104.0	7.5	7.2	-0.6	1.5	0.98
131	2019	hst2	75	.	.	101.8	102.4	8.9	8.3	-0.6	2.4	0.96
132	2020	hst2	74	.	.	101.9	101.6	9.4	9.2	0.3	2.3	0.97
133	2021	hst2	72	.	.	103.6	104.0	7.3	6.9	-0.4	1.9	0.97
134	2022	hst2	73	.	.	102.2	101.8	7.6	7.5	0.4	1.7	0.98
135	2023	hst2	51	.	.	101.9	102.2	7.6	7.4	-0.3	1.5	0.98
136	2019	hst3	77	.	.	101.9	102.5	8.6	7.9	-0.6	2.6	0.95
137	2020	hst3	74	.	.	102.8	102.4	9.6	9.6	0.3	2.4	0.97
138	2021	hst3	72	.	.	103.8	104.0	7.3	7.0	-0.3	2.1	0.96
139	2022	hst3	73	.	.	103.0	102.5	7.8	7.9	0.6	1.8	0.98
140	2023	hst3	51	.	.	102.6	102.9	7.7	7.7	-0.3	1.8	0.97
141	2019	hst	28	.	.	100.5	100.9	8.8	8.8	-0.4	1.8	0.98
142	2020	hst	23	.	.	102.3	102.5	8.1	7.9	-0.1	1.5	0.98
143	2021	hst	65	.	.	104.1	104.5	6.3	6.0	-0.4	1.9	0.96
144	2022	hst	73	.	.	102.9	102.5	7.3	7.3	0.4	1.4	0.98

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

Obs	BYR	name	no	mean_noff	std_noff	mean_ss	mean_oss	std_ss	std_oss	mean_dif	std_dif	corr_SS
145	2023	hst	51	.	.	102.6	103.3	7.3	7.2	-0.6	1.5	0.98
146	2019	fert	28	.	.	101.2	101.2	8.8	8.5	0.0	1.0	0.99
147	2020	fert	63	.	.	103.4	103.4	7.4	6.9	0.0	1.8	0.97
148	2021	fert	72	.	.	105.6	105.8	7.5	7.2	-0.2	1.5	0.98
149	2022	fert	73	.	.	104.4	104.4	7.7	7.5	0.0	1.6	0.98
150	2023	fert	51	.	.	105.0	105.0	6.3	6.3	0.0	1.4	0.98

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

Obs	diff	d_cr	d_nrr	d_icf	d_ifl	d_ais	d_hst	d_fert
1	-6	.	.	.	.	.	1	1
2	-5	.	1	.	1	1	.	.
3	-4	1	4	2	2	4	2	.
4	-3	6	10	16	10	7	12	15
5	-2	28	19	27	26	25	38	32
6	-1	55	53	66	53	46	54	60
7	0	75	62	97	54	67	51	82
8	1	46	50	56	58	44	49	57
9	2	30	21	18	20	31	23	34
10	3	5	12	5	10	8	12	5
11	4	1	1	3	.	1	1	2
12	5	.	1	.	.	.	.	2

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

Obs	diff	p_cr	p_nrr	p_icf	p_ifl	p_ais	p_hst	p_fert
1	-6	.	.	.	.	.	0	0
2	-5	.	0	.	0	0	.	.
3	-4	0	2	1	1	2	1	.
4	-3	2	4	6	4	3	5	5
5	-2	11	8	9	11	11	16	11
6	-1	22	23	23	23	20	22	21
7	0	30	26	33	23	29	21	28
8	1	19	21	19	25	19	20	20
9	2	12	9	6	9	13	9	12
10	3	2	5	2	4	3	5	2
11	4	0	0	1	.	0	0	1
12	5	.	0	.	.	.	.	1

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	cr0	20260	87.0	86.6	8.3	8.1	0.5	2.0	0.97
2	2011	cr0	19627	89.0	88.6	9.1	8.9	0.4	2.1	0.97
3	2012	cr0	20141	86.7	86.3	10.1	10.0	0.4	2.2	0.98
4	2013	cr0	18263	88.4	88.1	10.4	10.2	0.3	2.6	0.97
5	2014	cr0	18525	91.5	91.2	9.9	9.8	0.2	2.6	0.97
6	2015	cr0	17269	94.5	94.4	10.5	10.3	0.1	2.8	0.96
7	2016	cr0	16093	92.4	92.5	9.7	9.5	-0.1	2.7	0.96
8	2017	cr0	15145	94.8	94.5	10.1	9.9	0.3	2.7	0.96
9	2018	cr0	16279	98.1	97.9	9.0	8.9	0.2	2.5	0.96
10	2019	cr0	16390	98.2	98.3	10.9	11.0	-0.1	2.4	0.98
11	2020	cr0	18470	99.4	99.4	9.6	9.6	0.0	2.2	0.97
12	2021	cr0	22858	106.1	105.6	10.6	10.5	0.4	2.2	0.98
13	2022	cr0	14183	105.3	104.6	9.2	9.2	0.7	2.4	0.97
14	2023	cr0	1	.	.	.	.	.	.	.
15	2010	cr1	19386	92.2	92.0	6.7	6.6	0.2	1.7	0.97
16	2011	cr1	18801	93.5	93.5	7.0	6.9	0.0	1.8	0.97
17	2012	cr1	18636	92.7	92.9	6.7	6.5	-0.2	2.1	0.95
18	2013	cr1	16841	93.4	93.5	6.9	6.6	-0.1	2.3	0.94
19	2014	cr1	17157	94.8	94.9	7.3	7.0	-0.1	2.3	0.95
20	2015	cr1	16782	95.2	95.7	7.4	7.2	-0.4	2.5	0.94
21	2016	cr1	15408	94.5	94.6	7.2	6.9	-0.1	2.4	0.94
22	2017	cr1	14378	96.1	95.9	7.7	7.5	0.3	2.3	0.95
23	2018	cr1	15149	98.0	97.7	6.4	6.2	0.2	2.1	0.94
24	2019	cr1	14554	98.1	98.1	8.4	8.3	0.0	2.1	0.97
25	2020	cr1	15435	99.6	99.5	7.4	7.4	0.0	2.0	0.96
26	2021	cr1	8797	106.0	105.8	9.3	9.3	0.2	2.0	0.98
27	2010	cr2	14323	93.1	92.7	6.5	6.4	0.4	1.8	0.96
28	2011	cr2	14170	94.5	94.4	7.0	6.8	0.2	1.8	0.97
29	2012	cr2	14044	93.6	93.6	7.0	6.8	0.0	2.1	0.95
30	2013	cr2	12771	94.9	94.9	6.9	6.8	0.1	2.3	0.94
31	2014	cr2	13214	95.7	95.6	7.3	7.0	0.1	2.4	0.95
32	2015	cr2	12902	95.8	95.9	8.4	8.1	-0.1	2.5	0.95
33	2016	cr2	11985	95.8	95.7	7.4	7.1	0.1	2.4	0.95
34	2017	cr2	11106	97.0	96.5	8.1	8.0	0.4	2.3	0.96
35	2018	cr2	11613	98.4	98.0	6.5	6.3	0.4	2.1	0.95
36	2019	cr2	11037	98.8	98.7	8.4	8.4	0.2	2.1	0.97
37	2020	cr2	5848	100.5	100.5	7.3	7.3	0.0	2.1	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
38	2021	cr2	4	.	.	.	.	.	.	0.94
39	2010	cr3	9541	93.8	93.5	6.1	6.0	0.3	1.8	0.96
40	2011	cr3	9770	95.4	95.3	6.5	6.4	0.1	1.8	0.96
41	2012	cr3	9514	94.7	94.7	6.5	6.4	-0.1	2.1	0.95
42	2013	cr3	8902	95.9	95.9	6.4	6.2	0.0	2.2	0.94
43	2014	cr3	9208	96.8	96.6	6.8	6.5	0.1	2.3	0.94
44	2015	cr3	8668	96.6	96.7	7.9	7.6	-0.1	2.4	0.95
45	2016	cr3	8162	97.0	96.9	6.9	6.7	0.1	2.3	0.94
46	2017	cr3	7267	97.8	97.4	7.6	7.6	0.4	2.2	0.96
47	2018	cr3	7746	99.1	98.8	6.2	6.0	0.3	2.0	0.95
48	2019	cr3	3777	100.1	99.9	7.6	7.5	0.3	2.2	0.96
49	2020	cr3	10	.	.	.	.	.	.	1.00
50	2010	cr	22942	92.2	91.9	6.4	6.4	0.3	1.6	0.97
51	2011	cr	22226	93.8	93.7	6.9	6.8	0.0	1.7	0.97
52	2012	cr	22326	93.0	93.1	6.7	6.6	-0.1	2.0	0.96
53	2013	cr	20261	94.1	94.2	6.7	6.6	0.0	2.1	0.95
54	2014	cr	20707	95.1	95.1	7.2	6.9	0.0	2.2	0.95
55	2015	cr	19776	95.1	95.3	8.1	7.8	-0.2	2.3	0.96
56	2016	cr	18022	95.1	95.1	7.2	7.0	0.0	2.3	0.95
57	2017	cr	17042	96.4	96.0	7.9	7.8	0.4	2.2	0.96
58	2018	cr	18050	97.9	97.6	6.4	6.2	0.3	2.0	0.95
59	2019	cr	17738	98.1	98.0	8.4	8.3	0.1	2.0	0.97
60	2020	cr	19440	99.6	99.7	7.2	7.3	-0.1	2.0	0.96
61	2021	cr	23231	105.0	104.6	8.6	8.4	0.4	2.1	0.97
62	2022	cr	14183	103.8	102.7	6.8	6.5	1.1	2.5	0.93
63	2023	cr	1	.	.	.	.	.	.	.
64	2010	nrr0	19604	93.7	93.1	6.6	6.6	0.6	1.9	0.96
65	2011	nrr0	19142	94.4	93.9	7.3	7.2	0.5	2.0	0.96
66	2012	nrr0	19495	93.1	92.6	7.3	7.1	0.5	2.1	0.96
67	2013	nrr0	17759	94.1	93.7	8.0	7.8	0.4	2.5	0.95
68	2014	nrr0	18035	96.1	95.8	8.0	7.8	0.3	2.4	0.95
69	2015	nrr0	16781	97.5	97.5	8.7	8.5	0.1	2.5	0.96
70	2016	nrr0	15628	95.8	95.8	8.2	8.2	0.0	2.6	0.95
71	2017	nrr0	14738	96.8	96.4	8.6	8.3	0.3	2.5	0.96
72	2018	nrr0	15857	99.5	99.4	7.7	7.6	0.2	2.3	0.95
73	2019	nrr0	16011	99.4	99.5	8.7	8.7	-0.1	2.2	0.97
74	2020	nrr0	18049	99.3	99.2	7.5	7.5	0.1	2.0	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	2021	nrr0	22186	103.4	103.3	7.9	7.9	0.1	2.0	0.97
76	2022	nrr0	19228	101.8	101.6	7.5	7.5	0.2	2.1	0.96
77	2023	nrr0	162	102.0	102.4	6.2	6.1	-0.3	2.7	0.90
78	2010	nrr1	18687	96.6	96.5	5.8	5.8	0.1	1.6	0.96
79	2011	nrr1	18117	97.6	97.6	6.2	6.2	0.0	1.6	0.97
80	2012	nrr1	18022	97.0	97.1	5.9	5.8	-0.1	1.8	0.96
81	2013	nrr1	16385	97.6	97.7	5.8	5.8	-0.1	2.0	0.94
82	2014	nrr1	16616	98.7	99.0	6.2	6.1	-0.3	2.0	0.95
83	2015	nrr1	16348	98.1	98.8	7.3	7.2	-0.6	2.2	0.95
84	2016	nrr1	15032	97.1	97.4	6.3	6.3	-0.3	2.1	0.94
85	2017	nrr1	13992	98.2	98.1	6.7	6.5	0.1	2.1	0.95
86	2018	nrr1	14737	98.7	98.6	5.8	5.8	0.1	2.0	0.94
87	2019	nrr1	14185	99.4	99.6	7.2	7.2	-0.1	2.0	0.96
88	2020	nrr1	15003	99.5	99.5	6.3	6.3	0.0	1.9	0.95
89	2021	nrr1	11595	102.4	102.0	6.6	6.4	0.4	1.9	0.96
90	2022	nrr1	216	102.4	101.7	5.2	4.9	0.6	2.0	0.92
91	2010	nrr2	13912	98.0	97.7	5.7	5.5	0.3	1.6	0.96
92	2011	nrr2	13736	98.8	98.6	6.1	5.9	0.2	1.6	0.97
93	2012	nrr2	13685	98.0	98.1	6.3	6.1	-0.1	1.8	0.96
94	2013	nrr2	12382	99.8	99.8	6.3	6.1	0.0	2.0	0.95
95	2014	nrr2	12852	99.7	99.7	6.5	6.1	0.1	2.1	0.95
96	2015	nrr2	12529	99.1	99.3	9.0	8.7	-0.3	2.2	0.97
97	2016	nrr2	11726	98.4	98.5	7.0	6.7	-0.1	2.1	0.95
98	2017	nrr2	10836	99.5	99.3	8.5	8.3	0.2	2.0	0.97
99	2018	nrr2	11352	98.8	98.4	6.3	6.1	0.5	1.9	0.95
100	2019	nrr2	10817	100.2	100.1	7.9	7.9	0.1	1.9	0.97
101	2020	nrr2	8163	100.3	100.4	7.1	7.2	-0.1	1.9	0.97
102	2021	nrr2	227	100.7	100.9	6.1	6.0	-0.1	1.8	0.96
103	2010	nrr3	9208	97.1	97.3	5.0	5.1	-0.2	1.4	0.96
104	2011	nrr3	9505	98.4	98.7	5.3	5.4	-0.3	1.4	0.97
105	2012	nrr3	9220	98.3	98.7	5.3	5.2	-0.4	1.6	0.95
106	2013	nrr3	8612	99.3	99.7	5.1	5.2	-0.5	1.8	0.94
107	2014	nrr3	8918	99.5	99.8	5.3	5.3	-0.3	1.8	0.94
108	2015	nrr3	8454	99.3	99.7	7.0	7.0	-0.5	1.9	0.96
109	2016	nrr3	7949	98.9	99.1	5.9	6.0	-0.2	1.8	0.95
110	2017	nrr3	7062	99.6	99.6	7.5	7.5	0.0	1.7	0.97
111	2018	nrr3	7580	99.5	99.4	5.8	5.8	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
112	2019	nrr3	5027	100.1	100.1	7.0	7.1	0.0	1.7	0.97
113	2020	nrr3	144	103.0	103.0	7.3	7.5	-0.1	2.1	0.96
114	2010	nrr	22630	96.7	96.7	5.4	5.4	0.0	1.4	0.97
115	2011	nrr	22000	97.8	97.9	5.8	5.8	-0.1	1.3	0.97
116	2012	nrr	22076	97.5	97.7	5.7	5.6	-0.3	1.5	0.96
117	2013	nrr	20082	98.5	98.8	5.5	5.5	-0.3	1.7	0.95
118	2014	nrr	20483	98.9	99.2	5.8	5.7	-0.3	1.8	0.95
119	2015	nrr	19538	98.4	98.9	7.7	7.6	-0.5	1.9	0.97
120	2016	nrr	17839	97.8	98.0	6.2	6.2	-0.2	1.8	0.96
121	2017	nrr	16835	98.8	98.7	7.6	7.5	0.1	1.8	0.97
122	2018	nrr	17892	98.7	98.5	5.8	5.7	0.2	1.6	0.96
123	2019	nrr	17591	99.4	99.4	7.5	7.6	0.0	1.7	0.98
124	2020	nrr	19330	99.7	99.8	6.5	6.6	-0.1	1.7	0.97
125	2021	nrr	22918	101.7	101.0	6.2	5.8	0.7	1.9	0.95
126	2022	nrr	19240	100.8	100.1	5.0	4.6	0.8	2.1	0.90
127	2023	nrr	162	101.6	101.2	4.7	3.7	0.4	2.9	0.79
128	2010	icf1	18973	99.5	98.6	7.3	7.4	0.9	1.5	0.98
129	2011	icf1	18402	98.8	98.0	6.5	6.5	0.8	1.5	0.97
130	2012	icf1	18274	98.7	98.0	6.4	6.3	0.7	1.6	0.97
131	2013	icf1	16592	98.4	97.8	6.5	6.3	0.6	1.8	0.96
132	2014	icf1	16811	98.1	97.4	6.5	6.3	0.6	1.9	0.96
133	2015	icf1	16499	98.3	97.7	6.6	6.4	0.6	2.0	0.95
134	2016	icf1	15147	98.7	98.2	6.9	6.7	0.5	2.0	0.96
135	2017	icf1	14104	99.4	99.1	6.2	6.1	0.3	1.8	0.96
136	2018	icf1	14856	99.9	99.8	6.0	6.0	0.1	1.8	0.96
137	2019	icf1	14319	98.7	98.7	6.3	6.3	0.0	1.7	0.96
138	2020	icf1	15143	100.2	100.2	6.9	6.8	0.0	1.6	0.97
139	2021	icf1	11621	101.3	101.3	6.0	5.9	0.0	1.6	0.96
140	2022	icf1	55	99.8	99.5	4.3	3.7	0.3	2.2	0.85
141	2010	icf2	14144	100.2	99.2	7.4	7.4	1.0	1.6	0.98
142	2011	icf2	13970	99.6	98.7	6.8	6.7	0.9	1.7	0.97
143	2012	icf2	13863	99.0	98.1	7.0	6.9	0.8	1.8	0.97
144	2013	icf2	12570	98.6	97.8	6.8	6.6	0.8	2.0	0.95
145	2014	icf2	13024	98.4	97.5	6.9	6.7	0.8	2.1	0.95
146	2015	icf2	12711	98.7	98.0	6.7	6.5	0.7	2.2	0.95
147	2016	icf2	11868	98.9	98.3	7.2	7.0	0.6	2.1	0.96
148	2017	icf2	10980	99.7	99.2	6.7	6.5	0.4	2.0	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
149	2018	icf2	11508	100.5	100.3	6.5	6.3	0.1	1.9	0.96
150	2019	icf2	10966	98.8	98.6	6.5	6.5	0.1	1.8	0.96
151	2020	icf2	8023	100.7	100.6	7.2	7.2	0.0	1.8	0.97
152	2021	icf2	81	104.0	104.5	5.8	5.7	-0.5	1.4	0.97
153	2010	icf3	9439	100.1	99.0	7.3	7.2	1.1	1.7	0.97
154	2011	icf3	9669	99.4	98.4	6.5	6.4	1.0	1.8	0.96
155	2012	icf3	9403	99.1	98.4	7.0	6.9	0.7	1.9	0.96
156	2013	icf3	8778	98.8	98.1	6.7	6.4	0.7	2.2	0.95
157	2014	icf3	9086	98.8	98.1	6.8	6.4	0.6	2.2	0.94
158	2015	icf3	8615	98.7	98.0	6.4	6.2	0.7	2.3	0.93
159	2016	icf3	8101	99.9	99.3	6.8	6.5	0.6	2.2	0.95
160	2017	icf3	7226	99.6	99.1	6.9	6.7	0.6	2.1	0.95
161	2018	icf3	7746	101.0	100.9	6.1	6.0	0.1	2.0	0.94
162	2019	icf3	4993	99.8	99.6	5.9	5.8	0.2	2.1	0.94
163	2020	icf3	88	100.9	100.6	6.4	6.4	0.3	1.8	0.96
164	2010	icf	19528	99.5	98.5	7.2	7.2	1.0	1.4	0.98
165	2011	icf	18996	99.0	98.1	6.4	6.4	0.9	1.5	0.97
166	2012	icf	18826	98.6	97.9	6.7	6.6	0.7	1.7	0.97
167	2013	icf	17094	98.3	97.7	6.5	6.3	0.7	1.8	0.96
168	2014	icf	17346	98.1	97.5	6.6	6.3	0.7	1.9	0.96
169	2015	icf	16961	98.2	97.6	6.3	6.1	0.6	2.0	0.95
170	2016	icf	15592	98.9	98.4	6.8	6.6	0.5	2.0	0.96
171	2017	icf	14509	99.2	98.9	6.4	6.3	0.4	1.9	0.96
172	2018	icf	15250	100.2	100.2	6.0	6.0	0.1	1.8	0.96
173	2019	icf	14641	98.7	98.6	6.1	6.1	0.1	1.7	0.96
174	2020	icf	15331	100.2	100.2	6.8	6.7	0.0	1.7	0.97
175	2021	icf	11624	101.1	101.0	5.8	5.7	0.1	1.8	0.95
176	2022	icf	55	99.4	98.9	4.5	3.7	0.5	2.6	0.82
177	2010	ifl0	18991	92.1	91.0	7.8	7.6	1.1	1.8	0.97
178	2011	ifl0	18560	93.8	92.8	8.5	8.3	1.0	1.9	0.97
179	2012	ifl0	18927	91.1	90.3	10.0	9.8	0.9	2.1	0.98
180	2013	ifl0	17285	92.4	91.6	9.8	9.6	0.8	2.4	0.97
181	2014	ifl0	17546	94.5	93.8	9.2	9.0	0.7	2.4	0.97
182	2015	ifl0	16333	96.9	96.4	9.2	8.9	0.5	2.6	0.96
183	2016	ifl0	15241	95.5	95.1	8.6	8.4	0.3	2.6	0.95
184	2017	ifl0	14361	96.5	96.1	8.7	8.4	0.5	2.5	0.96
185	2018	ifl0	15511	99.4	99.0	8.3	8.1	0.5	2.3	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
186	2019	ifl0	15682	98.9	98.9	9.6	9.6	0.0	2.2	0.97
187	2020	ifl0	17679	99.7	99.7	9.1	9.1	0.0	2.0	0.97
188	2021	ifl0	21758	103.7	103.5	8.7	8.6	0.2	2.0	0.97
189	2022	ifl0	18968	102.8	102.4	7.9	7.8	0.3	2.1	0.96
190	2023	ifl0	162	102.9	102.9	5.8	5.5	0.0	2.5	0.91
191	2010	ifl1	18868	96.2	95.3	7.3	7.2	0.9	1.9	0.97
192	2011	ifl1	18313	96.6	95.9	7.3	7.3	0.7	1.9	0.97
193	2012	ifl1	18160	95.5	94.9	7.2	7.0	0.6	2.2	0.95
194	2013	ifl1	16462	95.7	95.1	6.9	6.7	0.6	2.4	0.94
195	2014	ifl1	16685	96.8	96.3	7.6	7.5	0.5	2.4	0.95
196	2015	ifl1	16379	97.0	96.8	7.0	6.6	0.1	2.5	0.93
197	2016	ifl1	15022	95.9	95.7	7.8	7.7	0.3	2.5	0.95
198	2017	ifl1	13996	97.7	97.2	7.0	6.9	0.5	2.3	0.94
199	2018	ifl1	14764	99.2	98.9	7.0	6.9	0.3	2.2	0.95
200	2019	ifl1	14230	98.2	98.2	7.7	7.6	0.1	2.2	0.96
201	2020	ifl1	15046	100.0	100.0	8.0	8.0	-0.1	2.1	0.96
202	2021	ifl1	11710	103.6	103.2	7.7	7.5	0.4	2.2	0.96
203	2022	ifl1	222	104.4	102.8	7.1	5.9	1.6	3.2	0.89
204	2010	ifl2	14088	97.5	96.2	7.1	7.2	1.4	1.9	0.97
205	2011	ifl2	13921	98.2	97.1	7.3	7.3	1.1	1.9	0.96
206	2012	ifl2	13794	96.7	95.7	7.4	7.3	0.9	2.2	0.95
207	2013	ifl2	12507	97.6	96.7	7.2	7.1	0.9	2.4	0.94
208	2014	ifl2	12958	98.2	97.3	7.6	7.3	0.9	2.5	0.95
209	2015	ifl2	12642	98.1	97.6	7.6	7.3	0.5	2.6	0.94
210	2016	ifl2	11814	97.8	97.3	7.9	7.6	0.5	2.5	0.95
211	2017	ifl2	10943	98.8	98.0	8.0	7.9	0.7	2.4	0.96
212	2018	ifl2	11458	100.1	99.4	7.1	7.0	0.7	2.2	0.95
213	2019	ifl2	10923	98.8	98.5	8.4	8.3	0.3	2.2	0.97
214	2020	ifl2	8262	101.1	101.2	7.9	7.9	-0.1	2.3	0.96
215	2021	ifl2	229	104.1	104.6	7.1	7.1	-0.6	2.1	0.96
216	2010	ifl3	9393	97.1	96.1	6.8	6.8	1.0	2.0	0.96
217	2011	ifl3	9624	98.2	97.3	7.1	6.9	0.9	2.0	0.96
218	2012	ifl3	9337	96.9	96.3	7.5	7.3	0.6	2.3	0.95
219	2013	ifl3	8728	97.6	96.9	7.1	6.9	0.6	2.5	0.94
220	2014	ifl3	9038	98.7	98.1	7.5	7.2	0.6	2.6	0.94
221	2015	ifl3	8557	98.7	98.3	8.0	7.6	0.4	2.7	0.94
222	2016	ifl3	8058	99.2	98.6	7.8	7.6	0.6	2.6	0.94

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
223	2017	ifl3	7190	99.3	98.4	8.3	8.2	0.8	2.4	0.96
224	2018	ifl3	7706	100.9	100.4	7.2	7.0	0.6	2.2	0.95
225	2019	ifl3	5137	100.3	99.8	8.3	8.1	0.5	2.2	0.96
226	2020	ifl3	150	103.3	103.2	7.8	7.9	0.1	2.4	0.95
227	2010	ifl	22483	96.2	95.1	7.0	7.0	1.1	1.7	0.97
228	2011	ifl	21889	97.0	96.1	7.2	7.1	0.9	1.8	0.97
229	2012	ifl	21919	95.7	95.0	7.3	7.1	0.6	2.1	0.96
230	2013	ifl	19961	96.3	95.7	7.0	6.8	0.6	2.2	0.95
231	2014	ifl	20361	97.2	96.7	7.5	7.3	0.6	2.3	0.95
232	2015	ifl	19431	97.2	96.9	7.4	7.1	0.3	2.4	0.95
233	2016	ifl	17742	97.0	96.6	7.8	7.7	0.4	2.4	0.95
234	2017	ifl	16738	98.0	97.3	7.8	7.7	0.7	2.3	0.96
235	2018	ifl	17788	99.6	99.1	7.0	6.8	0.5	2.1	0.95
236	2019	ifl	17479	98.1	97.9	8.2	8.1	0.3	2.1	0.97
237	2020	ifl	19216	100.1	100.2	7.8	7.8	-0.2	2.1	0.96
238	2021	ifl	22599	102.4	101.7	7.4	7.0	0.7	2.3	0.95
239	2022	ifl	18980	102.9	101.2	6.7	5.6	1.7	3.0	0.89
240	2023	ifl	162	103.6	102.7	6.4	4.6	1.0	3.5	0.85
241	2010	ais0	18643	93.8	92.6	6.9	6.9	1.3	1.9	0.96
242	2011	ais0	18182	94.6	93.5	7.5	7.4	1.1	2.0	0.96
243	2012	ais0	18641	93.0	91.9	8.2	8.0	1.1	2.2	0.96
244	2013	ais0	16880	93.8	93.0	8.4	8.1	0.9	2.6	0.95
245	2014	ais0	17258	96.0	95.1	8.3	8.1	0.9	2.5	0.95
246	2015	ais0	16060	98.0	97.3	8.7	8.4	0.7	2.7	0.95
247	2016	ais0	14922	95.8	95.4	8.3	8.0	0.4	2.7	0.95
248	2017	ais0	13916	97.4	96.9	8.8	8.4	0.5	2.6	0.95
249	2018	ais0	15103	99.2	98.8	8.0	7.8	0.4	2.4	0.95
250	2019	ais0	15106	99.3	99.3	9.8	9.8	0.0	2.3	0.97
251	2020	ais0	17179	99.2	99.2	8.3	8.2	0.0	2.1	0.97
252	2021	ais0	21500	104.0	104.0	8.7	8.7	0.0	2.1	0.97
253	2022	ais0	19194	101.8	101.7	8.6	8.6	0.1	2.2	0.97
254	2023	ais0	162	101.7	102.2	6.8	6.4	-0.5	2.6	0.93
255	2010	ais1	18516	97.8	97.0	6.3	6.3	0.8	1.7	0.96
256	2011	ais1	17944	98.2	97.5	6.5	6.5	0.6	1.7	0.96
257	2012	ais1	17845	97.4	96.9	6.3	6.3	0.5	2.0	0.95
258	2013	ais1	16160	97.6	97.1	6.1	6.1	0.5	2.2	0.93
259	2014	ais1	16441	98.7	98.3	6.8	6.8	0.3	2.2	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
260	2015	ais1	16192	98.3	98.3	7.0	6.8	-0.1	2.4	0.94
261	2016	ais1	14929	97.1	97.0	6.9	6.9	0.1	2.3	0.94
262	2017	ais1	13853	98.3	97.9	7.1	7.0	0.4	2.2	0.95
263	2018	ais1	14673	99.1	98.9	6.1	6.1	0.3	2.1	0.94
264	2019	ais1	14123	98.8	98.8	7.5	7.5	0.1	2.1	0.96
265	2020	ais1	14939	99.6	99.6	6.7	6.8	-0.1	2.0	0.96
266	2021	ais1	11133	103.7	103.4	7.5	7.3	0.3	2.0	0.96
267	2022	ais1	36	104.0	103.1	4.7	4.1	0.9	3.1	0.76
268	2010	ais2	13793	98.6	97.4	6.2	6.2	1.2	1.8	0.96
269	2011	ais2	13620	99.3	98.4	6.6	6.5	0.9	1.8	0.96
270	2012	ais2	13556	98.1	97.4	6.6	6.5	0.7	2.1	0.95
271	2013	ais2	12251	99.3	98.6	6.5	6.3	0.7	2.2	0.94
272	2014	ais2	12757	99.4	98.7	7.0	6.7	0.7	2.3	0.95
273	2015	ais2	12445	99.1	98.8	8.1	8.0	0.3	2.4	0.96
274	2016	ais2	11647	98.5	98.2	7.2	7.0	0.3	2.3	0.95
275	2017	ais2	10783	99.4	98.8	8.0	8.0	0.6	2.2	0.96
276	2018	ais2	11298	99.8	99.2	6.4	6.3	0.7	2.0	0.95
277	2019	ais2	10778	99.6	99.4	8.3	8.3	0.2	2.0	0.97
278	2020	ais2	7710	100.4	100.5	7.0	7.0	-0.1	2.1	0.96
279	2021	ais2	75	103.3	103.6	6.2	5.9	-0.3	2.2	0.94
280	2010	ais3	9144	97.4	96.7	5.6	5.6	0.7	1.7	0.95
281	2011	ais3	9426	98.5	98.0	6.0	6.0	0.5	1.7	0.96
282	2012	ais3	9138	98.1	97.8	6.1	5.9	0.3	2.0	0.95
283	2013	ais3	8553	98.7	98.4	5.7	5.6	0.3	2.1	0.93
284	2014	ais3	8864	99.4	99.1	6.3	6.1	0.4	2.1	0.94
285	2015	ais3	8393	99.4	99.1	7.6	7.4	0.3	2.2	0.96
286	2016	ais3	7913	99.2	98.8	6.7	6.7	0.4	2.2	0.95
287	2017	ais3	7030	99.5	98.8	7.3	7.3	0.6	2.1	0.96
288	2018	ais3	7560	100.5	100.1	6.3	6.2	0.4	1.9	0.95
289	2019	ais3	4759	100.5	100.3	7.5	7.6	0.2	2.0	0.97
290	2020	ais3	71	103.6	103.7	6.6	6.8	-0.1	1.8	0.97
291	2010	ais	22409	97.4	96.5	5.7	5.8	0.9	1.5	0.96
292	2011	ais	21825	98.2	97.5	6.1	6.1	0.6	1.5	0.97
293	2012	ais	21875	97.5	97.1	6.0	6.0	0.4	1.8	0.96
294	2013	ais	19845	98.2	97.7	5.8	5.8	0.4	1.9	0.94
295	2014	ais	20300	98.7	98.3	6.5	6.3	0.4	2.0	0.95
296	2015	ais	19355	98.4	98.3	7.4	7.3	0.2	2.1	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
297	2016	ais	17706	97.8	97.6	6.7	6.6	0.2	2.0	0.95
298	2017	ais	16671	98.7	98.1	7.3	7.3	0.5	2.0	0.96
299	2018	ais	17762	99.5	99.1	6.0	5.9	0.4	1.8	0.95
300	2019	ais	17435	99.0	98.8	7.7	7.8	0.2	1.8	0.97
301	2020	ais	19161	99.6	99.7	6.5	6.5	-0.1	1.8	0.96
302	2021	ais	22560	102.7	102.2	6.9	6.4	0.5	2.0	0.96
303	2022	ais	19200	101.6	100.8	5.9	5.3	0.8	2.3	0.92
304	2023	ais	162	101.5	101.7	5.7	4.3	-0.2	3.1	0.85
305	2010	fert	19528	95.8	94.6	7.1	7.1	1.2	1.8	0.97
306	2011	fert	18996	96.7	95.7	7.3	7.2	1.0	1.8	0.97
307	2012	fert	18826	95.2	94.4	7.5	7.3	0.8	2.1	0.96
308	2013	fert	17094	95.9	95.1	7.2	7.0	0.8	2.3	0.95
309	2014	fert	17346	97.0	96.3	7.7	7.4	0.7	2.3	0.95
310	2015	fert	16961	97.2	96.8	7.7	7.3	0.4	2.5	0.95
311	2016	fert	15592	96.9	96.4	7.9	7.7	0.5	2.4	0.95
312	2017	fert	14509	97.9	97.1	7.8	7.8	0.7	2.3	0.96
313	2018	fert	15250	99.6	99.1	7.1	6.9	0.5	2.1	0.96
314	2019	fert	14641	98.3	98.1	8.3	8.2	0.3	2.1	0.97
315	2020	fert	15331	100.0	100.2	7.7	7.7	-0.1	2.1	0.96
316	2021	fert	11624	103.4	102.9	7.7	7.3	0.5	2.3	0.95
317	2022	fert	55	103.3	102.6	5.6	4.4	0.7	3.4	0.79

JER SS and traditional breeding value for nongenotyped females with phenotype

Obs	diff	d_cr	d_nrr	d_icf	d_ifl	d_ais	d_hst	d_fert
1	-18	1	.	.	.	.	.	1
2	-17	1	.	.	2	.	.	1
3	-16	3	.	.	1	3	.	3
4	-15	6	.	.	6	.	.	5
5	-14	9	.	2	10	4	.	7
6	-13	13	6	4	13	6	.	15
7	-12	35	4	7	26	18	.	19
8	-11	79	22	14	66	23	.	48
9	-10	102	30	37	87	58	.	85
10	-9	225	69	58	187	110	.	152
11	-8	387	152	159	332	209	.	298
12	-7	739	362	251	615	425	.	508
13	-6	1377	757	571	1147	955	.	843
14	-5	2334	1542	1039	1961	1774	.	1472
15	-4	3924	3533	2019	3772	3073	.	2632
16	-3	7711	7987	4287	7381	6177	.	4964
17	-2	17506	19101	9492	14461	13719	.	10453
18	-1	44498	56485	20766	29307	34582	.	21468
19	0	87860	88670	55502	60837	74162	.	46019
20	1	47518	43272	64557	72054	69152	.	57852
21	2	18147	18704	20669	29637	25958	.	25340
22	3	9423	9060	7580	14142	12421	.	10103
23	4	5703	4622	3798	8000	6342	.	5227
24	5	3423	1969	2205	5177	3240	.	3128
25	6	2100	1187	1241	2989	1768	.	1959
26	7	1206	602	659	1720	977	.	1207
27	8	735	274	393	1260	520	.	760
28	9	374	104	221	659	288	.	491
29	10	231	52	102	412	151	.	290
30	11	129	33	66	207	72	.	180
31	12	59	10	33	127	46	.	99
32	13	45	3	11	71	17	.	52
33	14	16	3	6	44	6	.	39
34	15	12	1	.	16	5	.	17
35	16	9	.	2	10	3	.	7
36	17	3	.	.	8	1	.	4
37	18	2	.	2	1	1	.	1

JER SS and traditional breeding value for nongenotyped females with phenotype

Obs	diff	d_cr	d_nrr	d_icf	d_ifl	d_ais	d_hst	d_fert
38	19	.	.	.	2	.	.	1
39	20	.	.	.	.	.	.	2
40	21	.	.	.	1	.	.	1

JER SS and traditional breeding value for nongenotyped females with phenotype

Obs	diff	p_cr	p_nrr	p_icf	p_ifl	p_ais	p_hst	p_fert
1	-18	0	.	.	.	.	.	0
2	-17	0	.	.	0	.	.	0
3	-16	0	.	.	0	0	.	0
4	-15	0	.	.	0	.	.	0
5	-14	0	.	0	0	0	.	0
6	-13	0	0	0	0	0	.	0
7	-12	0	0	0	0	0	.	0
8	-11	0	0	0	0	0	.	0
9	-10	0	0	0	0	0	.	0
10	-9	0	0	0	0	0	.	0
11	-8	0	0	0	0	0	.	0
12	-7	0	0	0	0	0	.	0
13	-6	1	0	0	0	0	.	0
14	-5	1	1	1	1	1	.	1
15	-4	2	1	1	1	1	.	1
16	-3	3	3	2	3	2	.	3
17	-2	7	7	5	6	5	.	5
18	-1	17	22	11	11	13	.	11
19	0	34	34	28	24	29	.	24
20	1	19	17	33	28	27	.	30
21	2	7	7	11	12	10	.	13
22	3	4	4	4	6	5	.	5
23	4	2	2	2	3	2	.	3
24	5	1	1	1	2	1	.	2
25	6	1	0	1	1	1	.	1
26	7	0	0	0	1	0	.	1
27	8	0	0	0	0	0	.	0
28	9	0	0	0	0	0	.	0
29	10	0	0	0	0	0	.	0
30	11	0	0	0	0	0	.	0
31	12	0	0	0	0	0	.	0
32	13	0	0	0	0	0	.	0
33	14	0	0	0	0	0	.	0
34	15	0	0	.	0	0	.	0
35	16	0	.	0	0	0	.	0
36	17	0	.	.	0	0	.	0
37	18	0	.	0	0	0	.	0

JER SS and traditional breeding value for nongenotyped females with phenotype

Obs	diff	p_cr	p_nrr	p_icf	p_ifl	p_ais	p_hst	p_fert
38	19	.	.	.	0	.	.	0
39	20	.	.	.	.	.	.	0
40	21	.	.	.	0	.	.	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	cr0	55	182	195	88.7	90.6	13.2	11.5	-1.9	4.9	0.93
2	2011	cr0	47	155	180	88.2	88.4	15.1	12.8	-0.2	5.6	0.93
3	2012	cr0	47	321	612	91.7	91.3	14.8	14.2	0.4	4.6	0.95
4	2013	cr0	50	238	479	93.7	94.2	12.1	11.6	-0.6	4.7	0.92
5	2014	cr0	36	417	546	95.2	93.9	14.3	12.5	1.3	5.1	0.94
6	2015	cr0	30	1056	1078	102.7	101.8	17.0	16.8	1.0	4.0	0.97
7	2016	cr0	26	716	761	97.3	97.2	15.5	16.3	0.1	3.2	0.98
8	2017	cr0	29	1265	1018	100.6	100.9	18.2	18.3	-0.3	2.1	0.99
9	2018	cr0	21	927	1245	100.0	99.9	13.9	14.1	0.1	4.9	0.94
10	2019	cr0	30	1255	1082	110.5	109.2	18.0	17.6	1.3	3.4	0.98
11	2020	cr0	12	413	454	104.5	104.5	10.0	8.8	0.0	5.0	0.87
12	2010	cr1	55	171	186	92.8	94.7	10.2	9.5	-1.9	4.6	0.89
13	2011	cr1	47	144	170	94.6	94.9	12.2	11.0	-0.3	3.7	0.95
14	2012	cr1	47	299	556	94.8	95.1	11.4	10.7	-0.3	4.4	0.92
15	2013	cr1	50	227	439	94.6	95.0	8.8	8.6	-0.4	3.9	0.90
16	2014	cr1	36	393	502	98.3	97.7	12.3	12.1	0.7	4.1	0.95
17	2015	cr1	30	947	949	100.7	99.5	12.0	12.2	1.2	3.0	0.97
18	2016	cr1	26	625	651	98.8	98.0	13.8	13.3	0.8	2.6	0.98
19	2017	cr1	29	974	767	102.5	102.1	14.5	14.8	0.4	2.0	0.99
20	2018	cr1	20	619	842	100.0	99.9	13.4	13.6	0.1	5.1	0.93
21	2019	cr1	20	309	374	111.9	110.8	14.6	14.8	1.1	2.8	0.98
22	2010	cr2	55	130	145	93.8	95.7	9.8	9.4	-1.9	4.5	0.89
23	2011	cr2	47	110	132	95.9	96.2	12.3	11.1	-0.3	3.5	0.96
24	2012	cr2	47	228	416	94.9	95.2	11.9	10.7	-0.3	4.3	0.93
25	2013	cr2	50	175	332	95.8	96.2	9.2	9.0	-0.4	3.9	0.91
26	2014	cr2	36	309	393	99.1	98.5	11.4	11.5	0.6	3.8	0.94
27	2015	cr2	30	716	708	100.5	98.9	12.5	12.8	1.6	2.7	0.98
28	2016	cr2	26	482	503	99.8	99.0	12.9	12.6	0.7	2.3	0.98
29	2017	cr2	29	523	420	102.6	102.1	14.3	14.5	0.5	2.1	0.99
30	2010	cr3	55	88	101	94.5	96.4	9.4	8.8	-1.9	4.1	0.90
31	2011	cr3	47	76	87	96.9	97.3	11.7	10.2	-0.4	3.6	0.95
32	2012	cr3	47	150	261	95.3	95.6	11.3	10.0	-0.3	3.9	0.94
33	2013	cr3	49	122	223	96.6	97.0	8.4	8.5	-0.4	3.7	0.91
34	2014	cr3	36	214	277	99.4	99.0	10.2	10.9	0.4	3.5	0.95
35	2015	cr3	30	442	420	100.7	98.9	11.6	11.9	1.8	2.8	0.97
36	2016	cr3	26	271	274	100.1	99.7	11.7	11.5	0.4	2.0	0.99
37	2017	cr3	18	118	88	100.6	100.0	14.2	14.2	0.6	1.8	0.99

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	2010	cr	55	204	219	93.7	95.6	9.9	9.4	-1.9	4.4	0.90
39	2011	cr	47	175	202	95.8	96.1	12.3	11.0	-0.3	3.6	0.96
40	2012	cr	47	355	667	94.9	95.2	11.9	10.7	-0.4	4.1	0.94
41	2013	cr	50	267	524	95.5	95.9	9.0	9.0	-0.4	3.7	0.91
42	2014	cr	36	461	595	99.0	98.4	11.5	11.7	0.6	3.9	0.94
43	2015	cr	30	1146	1155	100.7	99.2	12.4	12.7	1.5	2.8	0.98
44	2016	cr	26	759	802	99.6	99.0	13.1	12.5	0.6	2.4	0.98
45	2017	cr	29	1317	1050	102.8	102.2	14.3	14.5	0.5	2.0	0.99
46	2018	cr	21	948	1274	99.1	100.0	12.7	12.2	-0.9	6.5	0.86
47	2019	cr	30	1259	1086	108.2	106.8	14.4	13.3	1.4	4.1	0.96
48	2020	cr	12	413	454	105.8	104.4	9.9	6.6	1.4	6.9	0.72
49	2010	nrr0	55	177	190	93.6	94.5	12.2	10.8	-0.9	5.2	0.90
50	2011	nrr0	47	152	177	92.5	92.2	12.7	11.4	0.3	5.3	0.91
51	2012	nrr0	47	314	598	95.3	95.6	10.8	10.1	-0.3	4.1	0.93
52	2013	nrr0	50	231	464	96.2	97.3	10.9	11.5	-1.1	4.3	0.93
53	2014	nrr0	36	406	530	95.8	94.7	12.7	12.2	1.1	4.5	0.93
54	2015	nrr0	30	1032	1052	102.0	101.1	15.1	14.8	0.9	3.5	0.97
55	2016	nrr0	26	700	745	96.2	95.8	13.1	14.4	0.4	3.5	0.97
56	2017	nrr0	29	1239	998	99.6	99.9	13.8	14.1	-0.3	2.3	0.99
57	2018	nrr0	21	912	1224	97.5	97.1	10.5	11.6	0.3	4.5	0.92
58	2019	nrr0	30	1332	1101	104.3	104.1	13.7	13.9	0.2	3.0	0.98
59	2020	nrr0	14	688	664	100.6	101.6	9.6	9.1	-1.0	3.9	0.91
60	2010	nrr1	55	167	181	96.0	96.5	8.8	8.7	-0.5	4.3	0.88
61	2011	nrr1	47	140	165	98.7	99.6	8.4	8.2	-0.9	3.4	0.92
62	2012	nrr1	47	291	544	97.5	98.3	9.3	8.7	-0.7	4.0	0.90
63	2013	nrr1	50	221	427	96.7	97.7	7.7	8.0	-1.0	3.6	0.90
64	2014	nrr1	36	383	490	99.8	99.7	10.2	10.2	0.1	3.1	0.95
65	2015	nrr1	30	928	929	101.3	100.6	10.6	10.1	0.7	2.6	0.97
66	2016	nrr1	26	611	639	96.8	95.4	10.8	10.7	1.4	3.2	0.96
67	2017	nrr1	29	974	772	102.5	102.1	10.5	11.0	0.4	2.3	0.98
68	2018	nrr1	20	639	854	98.0	97.3	11.4	11.7	0.7	4.4	0.93
69	2019	nrr1	23	439	482	105.0	103.9	8.0	8.0	1.1	2.6	0.95
70	2010	nrr2	55	126	141	97.2	98.3	8.6	8.3	-1.1	3.9	0.89
71	2011	nrr2	47	108	129	99.8	100.3	9.1	8.2	-0.5	3.5	0.93
72	2012	nrr2	47	223	413	98.0	98.5	11.2	9.9	-0.5	4.1	0.93
73	2013	nrr2	49	175	328	99.5	100.4	8.5	8.3	-0.9	3.9	0.89
74	2014	nrr2	36	302	384	100.2	100.3	9.0	9.0	-0.1	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
75	2015	nrr2	30	706	702	100.8	99.3	13.7	13.4	1.5	2.3	0.99
76	2016	nrr2	26	474	495	98.2	97.4	10.1	9.7	0.8	2.7	0.96
77	2017	nrr2	29	588	464	102.0	102.0	12.2	12.8	0.0	2.2	0.99
78	2018	nrr2	13	256	287	97.7	97.6	10.5	10.4	0.1	3.5	0.95
79	2010	nrr3	55	86	99	96.5	97.8	7.2	7.1	-1.3	3.3	0.89
80	2011	nrr3	47	74	84	100.1	100.9	7.9	7.4	-0.7	3.1	0.92
81	2012	nrr3	47	150	268	98.1	98.6	8.9	8.3	-0.5	3.3	0.93
82	2013	nrr3	49	118	217	99.1	99.4	7.4	6.9	-0.3	3.4	0.89
83	2014	nrr3	36	208	271	100.1	99.8	8.3	9.0	0.3	2.4	0.97
84	2015	nrr3	30	442	429	101.4	99.9	12.0	11.8	1.5	2.2	0.98
85	2016	nrr3	26	288	292	99.0	98.6	9.2	9.2	0.4	1.9	0.98
86	2017	nrr3	23	155	122	102.4	101.6	13.4	14.0	0.8	2.3	0.99
87	2010	nrr	55	202	217	96.4	97.4	7.9	7.8	-1.0	3.7	0.89
88	2011	nrr	47	173	201	99.7	100.4	8.5	7.9	-0.7	3.1	0.93
89	2012	nrr	47	353	663	97.8	98.4	9.8	9.1	-0.6	3.6	0.93
90	2013	nrr	50	264	518	98.3	99.0	7.6	7.4	-0.7	3.5	0.89
91	2014	nrr	36	456	589	100.1	99.8	8.9	9.3	0.2	2.5	0.96
92	2015	nrr	30	1137	1146	101.4	100.0	12.3	12.0	1.4	2.3	0.98
93	2016	nrr	26	754	797	98.2	97.2	9.7	9.7	1.0	2.4	0.97
94	2017	nrr	29	1310	1046	102.7	102.2	12.3	12.6	0.4	2.0	0.99
95	2018	nrr	21	947	1271	97.7	98.5	10.0	9.4	-0.8	5.5	0.84
96	2019	nrr	30	1345	1114	102.0	101.3	8.2	7.0	0.7	3.5	0.90
97	2020	nrr	14	688	664	103.3	101.6	7.3	4.2	1.7	5.6	0.65
98	2010	icf1	55	168	182	100.0	100.3	9.4	8.5	-0.3	2.8	0.96
99	2011	icf1	47	142	166	98.2	97.6	9.6	9.0	0.6	2.7	0.96
100	2012	icf1	47	293	547	97.2	96.9	10.1	10.3	0.3	3.0	0.96
101	2013	icf1	50	222	430	99.3	98.9	10.6	10.1	0.4	3.2	0.95
102	2014	icf1	36	386	493	98.5	97.8	11.0	10.9	0.7	1.9	0.99
103	2015	icf1	30	935	936	98.5	98.8	7.9	7.8	-0.3	2.1	0.97
104	2016	icf1	26	616	644	102.5	103.3	10.3	10.7	-0.8	3.0	0.96
105	2017	icf1	29	981	777	98.9	98.8	10.6	10.6	0.1	2.2	0.98
106	2018	icf1	20	643	862	99.1	100.1	10.7	9.9	-1.0	2.6	0.97
107	2019	icf1	22	449	489	103.3	101.5	6.5	6.7	1.8	2.8	0.91
108	2010	icf2	55	128	143	100.4	100.5	8.8	8.1	-0.2	3.0	0.94
109	2011	icf2	47	109	130	99.4	98.9	10.1	9.3	0.4	3.2	0.95
110	2012	icf2	47	226	418	98.0	97.3	10.3	10.2	0.6	3.2	0.95
111	2013	icf2	49	177	330	98.7	98.2	10.6	10.1	0.5	3.0	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	2014	icf2	36	305	388	98.9	98.1	11.3	11.1	0.8	2.4	0.98
113	2015	icf2	30	713	708	98.7	98.8	8.9	9.1	-0.1	2.5	0.96
114	2016	icf2	26	480	500	102.2	103.0	10.0	10.0	-0.8	2.4	0.97
115	2017	icf2	29	590	466	99.2	99.0	11.5	11.5	0.2	2.3	0.98
116	2018	icf2	13	232	260	99.5	100.8	12.6	11.3	-1.4	3.7	0.96
117	2010	icf3	55	88	101	100.8	101.0	9.0	8.4	-0.2	3.1	0.94
118	2011	icf3	47	75	85	98.9	98.9	10.2	9.2	0.0	3.0	0.96
119	2012	icf3	47	151	269	97.5	97.1	10.3	10.1	0.4	3.4	0.94
120	2013	icf3	49	121	221	100.2	99.6	10.4	10.0	0.6	2.9	0.96
121	2014	icf3	36	211	273	99.7	98.6	11.1	10.9	1.1	1.8	0.99
122	2015	icf3	30	450	435	98.7	98.5	9.2	9.6	0.2	2.4	0.97
123	2016	icf3	26	292	296	103.0	103.3	9.7	9.4	-0.4	2.8	0.96
124	2017	icf3	22	155	119	98.5	98.2	10.4	10.0	0.3	2.4	0.97
125	2010	icf	55	174	189	100.5	100.8	8.8	8.2	-0.3	2.9	0.95
126	2011	icf	47	147	174	98.8	98.4	9.7	9.0	0.3	2.9	0.96
127	2012	icf	47	303	566	97.6	97.1	9.9	10.0	0.5	3.0	0.95
128	2013	icf	50	230	444	99.5	99.0	10.2	9.7	0.5	2.9	0.96
129	2014	icf	36	399	509	99.1	98.3	10.9	10.8	0.9	1.9	0.99
130	2015	icf	30	966	965	98.6	98.7	8.3	8.5	0.0	2.3	0.96
131	2016	icf	26	634	662	102.6	103.2	9.7	9.8	-0.6	2.5	0.97
132	2017	icf	29	1003	792	99.1	98.9	10.7	10.7	0.2	2.1	0.98
133	2018	icf	20	648	869	99.3	100.3	10.4	9.8	-1.0	3.4	0.94
134	2019	icf	22	449	489	102.6	100.6	6.7	5.7	2.0	3.2	0.88
135	2010	ifl0	55	172	185	92.0	93.3	12.2	10.6	-1.3	5.0	0.91
136	2011	ifl0	47	147	172	92.0	90.9	14.8	12.3	1.1	5.3	0.94
137	2012	ifl0	47	306	583	93.3	93.5	15.1	14.5	-0.2	4.1	0.96
138	2013	ifl0	50	225	451	96.2	96.6	11.2	10.8	-0.4	4.7	0.91
139	2014	ifl0	36	395	515	96.4	95.4	12.2	11.4	1.1	4.1	0.94
140	2015	ifl0	30	1006	1023	101.0	100.3	15.9	15.5	0.7	3.5	0.98
141	2016	ifl0	26	686	730	98.2	98.2	12.7	13.8	-0.1	3.0	0.98
142	2017	ifl0	29	1211	975	98.4	98.9	16.3	16.6	-0.5	2.2	0.99
143	2018	ifl0	21	896	1203	99.2	99.0	12.4	13.1	0.2	3.8	0.96
144	2019	ifl0	30	1309	1082	104.9	104.5	14.8	14.4	0.4	2.9	0.98
145	2020	ifl0	14	681	657	102.1	102.5	9.0	8.0	-0.4	2.7	0.96
146	2010	ifl1	55	167	181	95.7	96.7	10.4	9.6	-1.0	4.7	0.89
147	2011	ifl1	47	141	165	96.6	96.9	12.5	11.6	-0.3	3.5	0.96
148	2012	ifl1	47	291	544	95.8	95.9	12.4	12.4	0.0	4.4	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
149	2013	ifl1	50	221	427	95.5	95.9	10.1	9.8	-0.4	3.3	0.94
150	2014	ifl1	36	383	490	98.1	97.6	13.2	13.5	0.6	2.9	0.98
151	2015	ifl1	30	930	931	100.3	99.6	11.2	11.4	0.7	3.1	0.96
152	2016	ifl1	26	612	640	99.0	98.2	13.9	13.6	0.8	2.4	0.98
153	2017	ifl1	29	977	774	101.1	100.8	14.1	14.3	0.3	2.3	0.99
154	2018	ifl1	20	641	857	97.5	97.0	14.5	15.1	0.5	5.5	0.93
155	2019	ifl1	23	444	488	108.3	105.5	10.5	9.5	2.8	3.9	0.93
156	2010	ifl2	55	128	142	96.8	97.8	10.4	9.8	-1.0	4.8	0.89
157	2011	ifl2	47	109	130	98.8	98.9	13.0	11.8	-0.1	3.7	0.96
158	2012	ifl2	47	225	417	96.7	96.6	12.0	11.2	0.2	4.1	0.94
159	2013	ifl2	49	176	328	97.4	97.6	10.8	10.4	-0.1	3.6	0.94
160	2014	ifl2	36	304	387	99.9	99.3	12.2	12.6	0.6	2.7	0.98
161	2015	ifl2	30	710	705	100.2	98.9	11.7	12.1	1.3	3.0	0.97
162	2016	ifl2	26	478	498	100.2	99.8	14.1	13.8	0.4	1.8	0.99
163	2017	ifl2	29	595	469	100.8	100.7	15.4	15.4	0.1	2.2	0.99
164	2018	ifl2	13	259	291	100.0	100.5	14.1	13.9	-0.5	5.4	0.93
165	2010	ifl3	55	87	100	96.7	98.3	10.3	9.6	-1.6	4.4	0.91
166	2011	ifl3	47	74	85	99.6	99.9	12.7	11.3	-0.3	3.5	0.97
167	2012	ifl3	47	151	270	96.1	96.2	11.7	10.8	-0.1	4.0	0.94
168	2013	ifl3	49	120	220	98.5	98.1	11.2	10.7	0.4	4.0	0.93
169	2014	ifl3	36	210	272	101.1	100.3	11.3	11.8	0.8	2.7	0.97
170	2015	ifl3	30	449	435	100.4	98.6	12.7	13.2	1.8	2.9	0.98
171	2016	ifl3	26	293	297	101.3	100.8	14.2	13.8	0.5	1.5	0.99
172	2017	ifl3	24	152	125	100.8	100.4	15.5	15.6	0.4	2.3	0.99
173	2010	ifl	55	201	215	96.4	97.7	10.3	9.6	-1.3	4.6	0.89
174	2011	ifl	47	172	200	98.4	98.7	12.7	11.5	-0.3	3.4	0.97
175	2012	ifl	47	351	660	96.1	96.0	12.0	11.3	0.1	4.1	0.94
176	2013	ifl	50	262	514	97.1	97.0	10.7	10.3	0.0	3.6	0.94
177	2014	ifl	36	454	585	99.9	99.2	12.1	12.5	0.7	2.8	0.97
178	2015	ifl	30	1130	1139	100.2	98.9	11.9	12.3	1.4	2.9	0.97
179	2016	ifl	26	750	792	100.5	99.7	14.1	13.8	0.8	1.6	0.99
180	2017	ifl	29	1299	1038	101.1	100.7	15.0	15.0	0.4	2.0	0.99
181	2018	ifl	21	938	1260	97.8	98.6	13.2	12.7	-0.8	7.2	0.85
182	2019	ifl	30	1324	1098	105.0	102.4	11.2	9.3	2.6	5.0	0.90
183	2020	ifl	14	681	657	107.4	104.1	11.5	7.6	3.2	6.6	0.84
184	2010	ais0	55	169	181	93.7	94.7	12.6	11.2	-1.0	5.1	0.91
185	2011	ais0	47	144	168	91.9	91.7	13.6	12.0	0.2	5.3	0.92

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
186	2012	ais0	47	301	572	94.9	93.8	12.4	12.2	1.1	4.0	0.95
187	2013	ais0	50	222	441	95.9	96.5	11.0	10.8	-0.6	4.6	0.91
188	2014	ais0	36	388	508	95.6	94.9	13.6	12.7	0.7	4.7	0.94
189	2015	ais0	30	983	1001	103.2	102.1	14.8	14.4	1.1	3.7	0.97
190	2016	ais0	26	673	716	98.0	98.5	13.3	13.8	-0.4	2.8	0.98
191	2017	ais0	29	1190	964	99.3	100.0	15.9	16.2	-0.7	1.8	0.99
192	2018	ais0	21	889	1195	97.1	97.3	11.0	11.7	-0.2	5.2	0.90
193	2019	ais0	30	1317	1086	104.0	103.8	16.8	16.6	0.2	3.1	0.98
194	2020	ais0	14	688	664	98.4	99.4	10.6	10.2	-0.9	2.2	0.98
195	2010	ais1	55	164	178	97.6	98.5	9.4	9.5	-0.9	4.5	0.89
196	2011	ais1	47	138	161	97.7	97.7	11.7	11.1	0.0	3.5	0.95
197	2012	ais1	47	288	538	96.9	96.3	11.2	11.4	0.6	4.1	0.93
198	2013	ais1	50	219	422	96.6	97.2	8.6	8.9	-0.6	3.7	0.91
199	2014	ais1	36	379	485	99.1	98.9	13.6	13.3	0.3	3.6	0.96
200	2015	ais1	30	919	919	101.5	100.8	11.0	11.0	0.7	3.0	0.96
201	2016	ais1	26	609	637	98.5	97.8	12.6	11.9	0.7	2.8	0.98
202	2017	ais1	29	965	765	101.1	100.9	12.6	12.6	0.1	1.8	0.99
203	2018	ais1	20	634	849	96.4	96.8	12.9	13.4	-0.4	5.3	0.92
204	2019	ais1	22	423	471	107.4	105.8	11.4	10.8	1.6	3.1	0.96
205	2010	ais2	55	125	139	98.3	99.3	8.8	8.9	-1.0	4.4	0.88
206	2011	ais2	47	106	126	99.3	99.2	12.3	10.8	0.1	3.6	0.96
207	2012	ais2	47	221	409	97.6	96.9	11.6	10.6	0.7	3.8	0.95
208	2013	ais2	49	173	324	98.9	99.8	8.9	8.7	-0.9	3.6	0.91
209	2014	ais2	36	300	382	100.1	99.6	11.8	11.8	0.4	3.3	0.96
210	2015	ais2	30	700	696	101.2	99.8	12.4	12.8	1.4	2.8	0.98
211	2016	ais2	26	472	493	99.7	99.3	12.6	12.1	0.5	2.3	0.98
212	2017	ais2	29	574	455	101.1	101.0	13.5	13.6	0.1	1.8	0.99
213	2018	ais2	13	220	249	97.3	97.7	12.0	12.8	-0.4	4.6	0.93
214	2010	ais3	55	86	99	97.4	99.0	8.0	7.9	-1.6	3.8	0.89
215	2011	ais3	47	73	83	99.7	100.1	10.7	9.4	-0.4	3.3	0.95
216	2012	ais3	47	148	263	97.4	97.0	11.0	10.0	0.4	3.5	0.95
217	2013	ais3	49	117	215	99.3	99.5	7.9	7.6	-0.2	3.5	0.90
218	2014	ais3	36	207	269	100.1	99.6	10.1	10.6	0.6	3.3	0.95
219	2015	ais3	30	438	424	101.7	99.9	11.5	11.6	1.8	2.7	0.97
220	2016	ais3	26	284	287	99.8	99.8	11.4	11.1	0.0	1.6	0.99
221	2017	ais3	22	147	114	100.4	99.8	13.7	14.1	0.6	2.3	0.99
222	2010	ais	55	200	214	97.6	98.9	8.4	8.5	-1.3	4.1	0.88

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
223	2011	ais	47	171	197	98.9	99.1	11.3	10.1	-0.3	3.1	0.96
224	2012	ais	47	350	658	97.2	96.7	11.2	10.5	0.5	3.6	0.95
225	2013	ais	50	262	512	98.2	98.5	8.2	8.1	-0.4	3.5	0.91
226	2014	ais	36	453	584	99.7	99.3	11.5	11.6	0.4	3.3	0.96
227	2015	ais	30	1126	1133	101.5	100.2	11.5	11.6	1.3	2.7	0.97
228	2016	ais	26	749	791	99.5	98.9	11.8	11.3	0.5	2.0	0.99
229	2017	ais	29	1297	1036	101.4	101.2	12.8	13.2	0.2	1.8	0.99
230	2018	ais	21	941	1265	96.3	97.7	10.9	10.8	-1.3	6.1	0.84
231	2019	ais	30	1334	1104	103.1	101.8	11.1	10.0	1.3	3.4	0.95
232	2020	ais	14	688	664	102.1	101.1	9.9	6.2	0.9	6.4	0.78
233	2010	fert	55	174	189	96.0	97.4	10.3	9.4	-1.3	4.5	0.90
234	2011	fert	47	147	174	97.4	97.5	12.8	11.3	-0.1	3.5	0.96
235	2012	fert	47	303	566	95.6	95.3	12.3	11.6	0.3	4.1	0.94
236	2013	fert	50	230	444	96.9	97.0	10.5	10.0	-0.1	3.4	0.95
237	2014	fert	36	399	509	99.3	98.4	12.2	12.5	0.9	3.0	0.97
238	2015	fert	30	966	965	100.6	99.3	12.3	12.8	1.4	3.2	0.97
239	2016	fert	26	634	662	100.2	99.7	13.7	13.5	0.5	1.4	0.99
240	2017	fert	29	1003	792	100.7	100.5	14.9	15.0	0.2	2.0	0.99
241	2018	fert	20	648	869	98.2	98.3	13.2	13.5	-0.2	5.8	0.91
242	2019	fert	22	449	489	107.2	104.6	11.9	10.2	2.6	3.7	0.95
243	2010	interval	55	174	189	97.7	98.7	9.7	8.8	-1.0	4.0	0.91
244	2011	interval	47	147	174	98.4	98.4	12.6	11.3	-0.1	3.2	0.97
245	2012	interval	47	303	566	96.1	96.0	11.8	11.3	0.2	3.6	0.95
246	2013	interval	50	230	444	97.7	97.5	11.3	10.8	0.2	3.2	0.96
247	2014	interval	36	399	509	99.4	98.6	12.4	12.5	0.8	2.3	0.98
248	2015	interval	30	966	965	99.6	98.6	10.6	11.2	1.0	2.7	0.97
249	2016	interval	26	634	662	101.4	101.3	13.3	12.9	0.2	1.9	0.99
250	2017	interval	29	1003	792	100.3	100.0	13.8	13.8	0.4	2.0	0.99
251	2018	interval	20	648	869	98.7	99.1	13.0	12.6	-0.4	5.4	0.91
252	2019	interval	22	449	489	105.8	102.9	9.9	8.0	2.9	3.7	0.94

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

Obs	diff	d_cr	d_nrr	d_icf	d_ifl	d_ais	d_hst	d_fert
1	-18	.	.	.	1	.	.	.
2	-17	1	.	.	.	.	.	.
3	-16	.	.	.	.	1	.	.
4	-15	.	1	.	.	.	.	.
5	-14	1	.	.	.	.	.	.
6	-13	.	.	.	1	.	.	1
7	-12	1	.	.	2	1	.	1
8	-11	3	.	.	2	2	.	4
9	-10	2	.	.	2	2	.	1
10	-9	3	1	1	.	4	.	.
11	-8	5	5	3	1	1	.	.
12	-7	9	3	1	8	6	.	5
13	-6	8	13	5	14	5	.	9
14	-5	11	18	6	7	16	.	11
15	-4	14	17	11	12	16	.	11
16	-3	23	26	19	21	20	.	20
17	-2	31	31	34	35	35	.	33
18	-1	47	51	54	39	44	.	37
19	0	63	59	67	56	63	.	63
20	1	53	50	62	62	50	.	60
21	2	30	41	36	38	44	.	41
22	3	23	19	24	27	18	.	21
23	4	14	22	17	13	23	.	11
24	5	14	6	8	9	12	.	10
25	6	7	7	7	6	3	.	4
26	7	3	9	3	6	6	.	3
27	8	5	2	.	7	5	.	5
28	9	5	1	3	5	5	.	3
29	10	3	.	1	4	2	.	3
30	11	1	.	.	4	.	.	2
31	12	2	1	.	1	.	.	1
32	13	.	2	.	.	1	.	.
33	14	.	.	.	.	.	.	2
34	15	.	.	.	1	.	.	.
35	16	1	.	.	1	.	.	.

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

Obs	diff	p_cr	p_nrr	p_icf	p_ifl	p_ais	p_hst	p_fert
1	-18	.	.	.	0	.	.	.
2	-17	0	.	.	.	.	.	.
3	-16	.	.	.	.	0	.	.
4	-15	.	0	.	.	.	.	.
5	-14	0	.	.	.	.	.	.
6	-13	.	.	.	0	.	.	0
7	-12	0	.	.	1	0	.	0
8	-11	1	.	.	1	1	.	1
9	-10	1	.	.	1	1	.	0
10	-9	1	0	0	.	1	.	.
11	-8	1	1	1	0	0	.	.
12	-7	2	1	0	2	2	.	1
13	-6	2	3	1	4	1	.	2
14	-5	3	5	2	2	4	.	3
15	-4	4	4	3	3	4	.	3
16	-3	6	7	5	5	5	.	6
17	-2	8	8	9	9	9	.	9
18	-1	12	13	15	10	11	.	10
19	0	16	15	19	15	16	.	17
20	1	14	13	17	16	13	.	17
21	2	8	11	10	10	11	.	11
22	3	6	5	7	7	5	.	6
23	4	4	6	5	3	6	.	3
24	5	4	2	2	2	3	.	3
25	6	2	2	2	2	1	.	1
26	7	1	2	1	2	2	.	1
27	8	1	1	.	2	1	.	1
28	9	1	0	1	1	1	.	1
29	10	1	.	0	1	1	.	1
30	11	0	.	.	1	.	.	1
31	12	1	0	.	0	.	.	0
32	13	.	1	.	.	0	.	.
33	14	.	.	.	.	.	.	1
34	15	.	.	.	0	.	.	.
35	16	0	.	.	0	.	.	.

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	fert	5608	98.7	99.0	10.6	7.1	-0.3	4.8	0.93
2	2020	fert	7371	100.4	100.3	10.2	6.7	0.1	4.8	0.92
3	2021	fert	8662	104.4	102.3	10.0	6.5	2.1	4.8	0.91
4	2022	fert	16117	103.9	102.0	9.4	6.0	1.8	4.9	0.89
5	2023	fert	13339	105.0	103.3	8.8	5.4	1.7	4.8	0.88
6	2024	fert	315	104.9	103.2	7.8	4.8	1.7	4.2	0.89

JER SS and twostep breeding value for genotyped females without phenotype

Obs	diff	d_fert	p_fert
1	-22	1	0
2	-19	2	0
3	-18	3	0
4	-17	9	0
5	-16	16	0
6	-15	10	0
7	-14	36	0
8	-13	90	0
9	-12	112	0
10	-11	191	0
11	-10	316	1
12	-9	479	1
13	-8	679	1
14	-7	1030	2
15	-6	1325	3
16	-5	1788	3
17	-4	2219	4
18	-3	2763	5
19	-2	3276	6
20	-1	3569	7
21	0	3908	8
22	1	4199	8
23	2	4121	8
24	3	3980	8
25	4	3724	7
26	5	3254	6
27	6	2810	5
28	7	2212	4
29	8	1692	3
30	9	1260	2
31	10	911	2
32	11	558	1
33	12	355	1
34	13	220	0
35	14	138	0
36	15	82	0
37	16	28	0

JER SS and twostep breeding value for genotyped females without phenotype

Obs	diff	d_fert	p_fert
38	17	26	0
39	18	10	0
40	19	4	0
41	20	3	0
42	21	2	0
43	24	1	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	fert	3511	98.0	97.8	10.2	7.5	0.2	4.2	0.93
2	2016	fert	3919	97.7	97.4	10.5	7.8	0.3	4.3	0.93
3	2017	fert	5162	98.9	98.3	10.3	7.7	0.6	4.3	0.93
4	2018	fert	6400	101.0	100.3	9.5	6.9	0.7	4.2	0.92
5	2019	fert	7559	100.0	99.8	10.7	7.9	0.2	4.4	0.93
6	2020	fert	8568	101.7	101.3	10.4	7.5	0.4	4.4	0.93
7	2021	fert	6760	105.6	103.9	9.7	7.0	1.7	4.4	0.91
8	2022	fert	32	103.9	102.2	7.3	5.1	1.7	3.5	0.90

JER SS and twostep breeding value for genotyped females with phenotype

Obs	diff	d_fert	p_fert
1	-20	1	0
2	-19	2	0
3	-18	4	0
4	-17	1	0
5	-16	10	0
6	-15	13	0
7	-14	23	0
8	-13	46	0
9	-12	88	0
10	-11	126	0
11	-10	211	1
12	-9	331	1
13	-8	552	1
14	-7	805	2
15	-6	1189	3
16	-5	1599	4
17	-4	2084	5
18	-3	2666	6
19	-2	3198	8
20	-1	3566	9
21	0	3767	9
22	1	3871	9
23	2	3642	9
24	3	3338	8
25	4	2954	7
26	5	2376	6
27	6	1822	4
28	7	1317	3
29	8	909	2
30	9	595	1
31	10	371	1
32	11	199	0
33	12	123	0
34	13	50	0
35	14	36	0
36	15	13	0
37	16	8	0

JER SS and twostep breeding value for genotyped females with phenotype

Obs	diff	d_fert	p_fert
38	17	4	0
39	18	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	fert	55	174	189	96.0	96.6	10.3	8.7	-0.6	2.9	0.97
2	2011	fert	47	147	174	97.4	98.1	12.8	10.6	-0.7	3.0	0.98
3	2012	fert	47	303	566	95.6	95.8	12.3	10.9	-0.2	2.6	0.98
4	2013	fert	50	230	444	96.9	97.9	10.5	9.2	-1.0	3.0	0.96
5	2014	fert	36	399	509	99.3	99.2	12.2	11.2	0.0	2.4	0.98
6	2015	fert	30	966	965	100.6	100.7	12.3	11.9	0.0	1.7	0.99
7	2016	fert	26	634	662	100.2	100.3	13.7	12.8	-0.2	2.4	0.99
8	2017	fert	29	1003	792	100.7	101.7	14.9	13.1	0.1	2.5	0.98
9	2018	fert	20	648	869	98.2	100.5	13.2	12.1	-2.3	3.5	0.97
10	2019	fert	22	449	489	107.2	105.5	11.9	9.9	1.6	4.1	0.94

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

Obs	diff	d_fert	p_fert
1	.	2	.
2	-9	3	1
3	-8	4	1
4	-7	2	1
5	-6	4	1
6	-5	17	5
7	-4	13	4
8	-3	24	7
9	-2	45	13
10	-1	69	19
11	0	52	14
12	1	48	13
13	2	30	8
14	3	18	5
15	4	15	4
16	5	6	2
17	6	4	1
18	7	3	1
19	8	2	1
20	9	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	fert	21	.	.	96.2	98.5	13.4	9.2	-2.2	5.4	0.95
2	2020	fert	32	.	.	105.6	105.0	9.2	5.8	0.6	4.8	0.89
3	2021	fert	40	.	.	105.7	104.0	9.1	6.0	1.7	4.4	0.91
4	2022	fert	34	.	.	105.8	104.4	8.2	4.4	1.4	4.5	0.91
5	2023	fert	28	.	.	106.5	104.0	5.8	3.8	2.5	4.3	0.68

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

Obs	diff	d_fert	p_fert
1	-11	2	1
2	-10	3	2
3	-9	2	1
4	-7	2	1
5	-6	6	4
6	-5	9	6
7	-4	5	3
8	-3	11	7
9	-2	3	2
10	-1	8	5
11	0	8	5
12	1	16	10
13	2	18	12
14	3	10	6
15	4	15	10
16	5	12	8
17	6	11	7
18	7	4	3
19	8	5	3
20	9	1	1
21	11	1	1
22	12	2	1
23	13	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	fert	517	101.6	101.9	10.3	6.7	-0.2	4.9	0.92
2	2021	fert	428	104.0	102.2	10.0	6.4	1.8	4.8	0.92
3	2022	fert	479	104.1	102.5	9.6	5.9	1.6	5.2	0.88
4	2023	fert	586	105.0	103.1	8.0	4.9	2.0	4.5	0.87
5	2024	fert	36	105.8	103.8	8.6	5.7	2.0	4.0	0.92

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

Obs	diff	d_fert	p_fert
1	-16	1	0
2	-14	2	0
3	-13	4	0
4	-12	4	0
5	-11	6	0
6	-10	14	1
7	-9	21	1
8	-8	32	2
9	-7	45	2
10	-6	56	3
11	-5	66	3
12	-4	82	4
13	-3	104	5
14	-2	122	6
15	-1	142	7
16	0	179	9
17	1	154	8
18	2	181	9
19	3	170	8
20	4	139	7
21	5	120	6
22	6	107	5
23	7	85	4
24	8	66	3
25	9	49	2
26	10	35	2
27	11	28	1
28	12	11	1
29	13	10	0
30	14	7	0
31	15	2	0
32	16	1	0
33	18	1	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	cr0	55	182	195	88.5	88.7	13.0	11.4	-0.3	2.9	0.98
2	2011	cr0	47	155	180	88.0	88.1	14.7	13.9	-0.1	2.8	0.98
3	2012	cr0	47	321	612	91.4	91.7	14.6	14.2	-0.3	3.2	0.98
4	2013	cr0	50	238	479	93.4	93.9	11.9	11.8	-0.5	3.1	0.97
5	2014	cr0	36	417	546	94.9	94.5	14.2	12.7	0.4	3.7	0.97
6	2015	cr0	30	1056	1078	102.4	102.0	16.9	16.3	0.4	3.5	0.98
7	2016	cr0	26	716	761	96.9	93.9	15.3	10.5	3.0	11.4	0.67
8	2017	cr0	29	1265	1018	100.2	99.8	17.7	11.6	0.4	11.1	0.79
9	2018	cr0	21	927	1245	99.5	96.4	13.8	9.1	3.1	10.8	0.62
10	2019	cr0	30	1255	1082	110.0	102.5	17.7	10.8	7.5	11.5	0.78
11	2020	cr0	12	413	454	104.2	96.5	9.6	4.8	7.7	7.9	0.58
12	2010	cr1	55	171	186	93.0	93.1	9.8	9.4	-0.2	1.7	0.99
13	2011	cr1	47	144	170	94.6	94.3	11.8	11.6	0.3	1.9	0.99
14	2012	cr1	47	299	556	95.0	95.1	11.0	10.9	-0.1	1.7	0.99
15	2013	cr1	50	227	439	94.6	95.3	8.5	8.9	-0.7	2.2	0.97
16	2014	cr1	36	393	502	98.3	98.5	12.0	11.5	-0.3	2.2	0.98
17	2015	cr1	30	947	949	100.7	101.2	11.7	11.7	-0.5	2.7	0.97
18	2016	cr1	26	625	651	98.8	97.1	13.2	9.8	1.7	9.1	0.72
19	2017	cr1	29	974	767	102.3	101.2	14.1	10.6	1.2	10.2	0.70
20	2018	cr1	20	619	842	99.9	97.5	12.9	9.0	2.5	10.9	0.55
21	2019	cr1	20	309	374	111.5	103.4	14.3	9.0	8.2	9.8	0.74
22	2010	cr2	55	130	145	93.8	94.1	9.5	9.2	-0.2	1.4	0.99
23	2011	cr2	47	110	132	95.8	95.6	11.9	11.8	0.2	1.5	0.99
24	2012	cr2	47	228	416	94.9	95.0	11.5	11.1	-0.1	1.8	0.99
25	2013	cr2	50	175	332	95.6	96.3	8.7	9.2	-0.7	2.1	0.97
26	2014	cr2	36	309	393	98.9	99.1	11.0	10.8	-0.3	2.0	0.98
27	2015	cr2	30	716	708	100.3	100.7	12.0	12.1	-0.4	2.3	0.98
28	2016	cr2	26	482	503	99.5	97.1	12.6	9.6	2.5	8.8	0.71
29	2017	cr2	29	523	420	102.3	101.0	13.7	10.6	1.3	9.2	0.74
30	2010	cr3	55	88	101	94.6	94.8	9.0	8.7	-0.2	1.3	0.99
31	2011	cr3	47	76	87	96.9	96.7	11.2	11.1	0.2	1.4	0.99
32	2012	cr3	47	150	261	95.4	95.3	10.9	10.6	0.1	1.7	0.99
33	2013	cr3	49	122	223	96.5	97.2	8.3	8.5	-0.7	1.8	0.98
34	2014	cr3	36	214	277	99.3	99.5	9.9	9.8	-0.3	1.7	0.98
35	2015	cr3	30	442	420	100.6	101.0	11.3	11.1	-0.4	1.9	0.99
36	2016	cr3	26	271	274	100.0	97.5	11.4	8.5	2.4	8.2	0.69
37	2017	cr3	18	118	88	100.5	99.2	13.7	11.1	1.3	8.1	0.81

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	2010	cr	55	204	219	93.7	93.9	9.7	9.3	-0.2	1.5	0.99
39	2011	cr	47	175	202	95.9	95.6	11.9	11.8	0.3	1.6	0.99
40	2012	cr	47	355	667	94.9	95.0	11.5	11.2	-0.1	1.9	0.99
41	2013	cr	50	267	524	95.4	96.1	8.8	9.0	-0.7	1.9	0.98
42	2014	cr	36	461	595	98.8	99.1	11.0	10.8	-0.3	1.8	0.99
43	2015	cr	30	1146	1155	100.5	101.0	12.0	11.8	-0.5	2.2	0.98
44	2016	cr	26	759	802	99.4	97.2	12.6	9.3	2.3	8.9	0.71
45	2017	cr	29	1317	1050	102.5	101.1	13.8	10.5	1.3	9.1	0.75
46	2018	cr	21	948	1274	98.8	96.0	12.3	9.4	2.8	10.1	0.60
47	2019	cr	30	1259	1086	107.8	102.4	13.8	10.0	5.3	7.9	0.82
48	2020	cr	12	413	454	105.6	99.1	9.6	6.4	6.5	6.7	0.72
49	2010	nrr0	55	177	190	93.3	93.5	12.0	10.7	-0.2	2.9	0.97
50	2011	nrr0	47	152	177	92.3	92.2	12.5	11.6	0.1	2.9	0.97
51	2012	nrr0	47	314	598	95.2	95.3	10.7	10.5	-0.1	3.7	0.94
52	2013	nrr0	50	231	464	95.9	97.0	10.7	11.1	-1.1	3.4	0.95
53	2014	nrr0	36	406	530	95.4	95.9	12.5	11.5	-0.5	3.4	0.96
54	2015	nrr0	30	1032	1052	101.6	102.0	14.9	15.1	-0.4	3.6	0.97
55	2016	nrr0	26	700	745	95.9	95.7	12.8	9.2	0.2	11.1	0.53
56	2017	nrr0	29	1239	998	99.3	100.2	13.6	10.3	-0.9	8.7	0.77
57	2018	nrr0	21	912	1224	97.2	98.0	10.4	7.4	-0.7	9.6	0.46
58	2019	nrr0	30	1332	1101	103.9	101.6	13.6	9.7	2.3	10.7	0.62
59	2020	nrr0	14	688	664	100.3	98.4	9.7	3.8	1.9	8.9	0.40
60	2010	nrr1	55	167	181	96.3	96.0	8.7	8.9	0.3	1.8	0.98
61	2011	nrr1	47	140	165	99.0	98.5	8.5	8.3	0.5	2.3	0.96
62	2012	nrr1	47	291	544	97.9	97.6	9.2	9.0	0.3	2.0	0.98
63	2013	nrr1	50	221	427	97.0	97.7	7.6	8.2	-0.8	2.0	0.97
64	2014	nrr1	36	383	490	100.0	100.4	10.2	10.1	-0.4	2.4	0.97
65	2015	nrr1	30	928	929	101.7	100.7	10.4	10.1	1.0	2.6	0.97
66	2016	nrr1	26	611	639	97.0	98.5	10.6	8.0	-1.5	8.5	0.62
67	2017	nrr1	29	974	772	102.7	101.8	10.4	9.5	0.8	7.2	0.74
68	2018	nrr1	20	639	854	98.1	99.2	11.3	7.5	-1.1	9.3	0.58
69	2019	nrr1	23	439	482	105.1	103.7	7.9	7.3	1.4	5.8	0.70
70	2010	nrr2	55	126	141	97.3	97.5	8.2	8.2	-0.2	1.4	0.98
71	2011	nrr2	47	108	129	99.8	99.4	8.6	8.5	0.4	1.6	0.98
72	2012	nrr2	47	223	413	98.0	97.6	10.6	10.3	0.4	1.7	0.99
73	2013	nrr2	49	175	328	99.7	99.7	8.1	8.4	0.0	2.2	0.97
74	2014	nrr2	36	302	384	100.2	100.4	8.6	8.9	-0.3	1.8	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
75	2015	nrr2	30	706	702	100.5	100.2	13.1	13.0	0.3	1.7	0.99
76	2016	nrr2	26	474	495	98.3	97.7	9.8	7.1	0.7	7.3	0.67
77	2017	nrr2	29	588	464	101.9	101.3	11.7	9.3	0.7	7.0	0.80
78	2018	nrr2	13	256	287	97.6	96.5	10.0	7.1	1.1	8.2	0.58
79	2010	nrr3	55	86	99	96.9	97.2	7.2	7.0	-0.3	1.3	0.98
80	2011	nrr3	47	74	84	100.6	100.3	7.9	7.9	0.3	1.5	0.98
81	2012	nrr3	47	150	268	98.5	98.2	9.0	8.4	0.3	1.7	0.98
82	2013	nrr3	49	118	217	99.5	99.6	7.3	7.3	-0.1	1.6	0.98
83	2014	nrr3	36	208	271	100.5	100.4	8.4	8.2	0.1	1.5	0.98
84	2015	nrr3	30	442	429	101.9	101.1	12.1	11.5	0.8	1.9	0.99
85	2016	nrr3	26	288	292	99.5	98.0	9.3	6.8	1.5	6.7	0.69
86	2017	nrr3	23	155	122	102.8	101.8	13.6	9.7	1.0	6.8	0.88
87	2010	nrr	55	202	217	96.6	96.7	7.8	7.7	-0.1	1.3	0.99
88	2011	nrr	47	173	201	100.0	99.6	8.4	8.3	0.4	1.6	0.98
89	2012	nrr	47	353	663	98.0	97.8	9.7	9.3	0.2	1.6	0.99
90	2013	nrr	50	264	518	98.5	98.9	7.5	7.8	-0.4	1.9	0.97
91	2014	nrr	36	456	589	100.1	100.4	8.8	8.8	-0.3	1.6	0.98
92	2015	nrr	30	1137	1146	101.6	100.9	12.2	11.7	0.7	1.8	0.99
93	2016	nrr	26	754	797	98.4	98.0	9.8	7.2	0.4	7.4	0.66
94	2017	nrr	29	1310	1046	102.9	102.0	12.0	9.5	1.0	6.4	0.85
95	2018	nrr	21	947	1271	98.0	97.3	9.8	7.8	0.7	7.3	0.68
96	2019	nrr	30	1345	1114	102.3	101.7	8.0	7.2	0.6	3.8	0.88
97	2020	nrr	14	688	664	103.6	100.0	7.3	6.3	3.6	3.9	0.84
98	2010	icf1	55	168	182	99.4	99.5	9.2	9.1	-0.1	1.4	0.99
99	2011	icf1	47	142	166	97.4	98.0	9.5	9.3	-0.5	1.8	0.98
100	2012	icf1	47	293	547	96.7	96.7	10.0	9.9	0.0	1.6	0.99
101	2013	icf1	50	222	430	98.6	98.8	10.4	10.5	-0.2	1.8	0.99
102	2014	icf1	36	386	493	97.8	98.2	10.8	10.8	-0.4	1.6	0.99
103	2015	icf1	30	935	936	98.0	98.9	7.8	8.6	-0.9	1.6	0.99
104	2016	icf1	26	616	644	101.8	99.4	10.1	7.9	2.3	6.2	0.79
105	2017	icf1	29	981	777	98.2	99.0	10.4	7.8	-0.8	7.8	0.66
106	2018	icf1	20	643	862	98.4	97.5	10.4	7.8	1.0	6.7	0.76
107	2019	icf1	22	449	489	102.6	101.0	6.3	7.8	1.6	4.5	0.81
108	2010	icf2	55	128	143	99.5	99.7	8.6	8.5	-0.2	1.4	0.99
109	2011	icf2	47	109	130	98.6	99.1	9.7	9.8	-0.5	1.4	0.99
110	2012	icf2	47	226	418	97.3	97.3	10.0	9.9	0.0	1.7	0.99
111	2013	icf2	49	177	330	98.0	98.3	10.3	10.3	-0.3	1.7	0.99

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	2014	icf2	36	305	388	98.3	98.7	10.9	10.8	-0.4	1.5	0.99
113	2015	icf2	30	713	708	97.9	99.0	8.8	9.8	-1.1	1.7	0.99
114	2016	icf2	26	480	500	101.3	98.5	9.8	8.6	2.8	5.4	0.84
115	2017	icf2	29	590	466	98.5	98.8	11.2	7.4	-0.3	7.8	0.72
116	2018	icf2	13	232	260	98.5	97.2	12.4	10.6	1.3	7.8	0.78
117	2010	icf3	55	88	101	100.1	100.2	8.6	8.7	-0.2	1.3	0.99
118	2011	icf3	47	75	85	98.3	98.8	9.7	9.7	-0.5	1.4	0.99
119	2012	icf3	47	151	269	96.9	97.0	9.9	9.9	-0.1	1.5	0.99
120	2013	icf3	49	121	221	99.5	99.7	10.0	10.0	-0.2	1.4	0.99
121	2014	icf3	36	211	273	99.1	99.4	10.6	10.9	-0.4	1.6	0.99
122	2015	icf3	30	450	435	98.0	98.9	8.8	9.8	-1.0	1.5	0.99
123	2016	icf3	26	292	296	102.2	99.7	9.3	8.0	2.5	5.2	0.83
124	2017	icf3	22	155	119	97.9	97.3	9.9	7.6	0.6	7.0	0.71
125	2010	icf	55	174	189	99.7	99.9	8.7	8.6	-0.2	1.3	0.99
126	2011	icf	47	147	174	98.1	98.6	9.4	9.4	-0.4	1.5	0.99
127	2012	icf	47	303	566	96.8	96.9	9.7	9.7	-0.1	1.6	0.99
128	2013	icf	50	230	444	98.8	99.0	9.9	9.9	-0.2	1.5	0.99
129	2014	icf	36	399	509	98.4	98.9	10.5	10.7	-0.5	1.4	0.99
130	2015	icf	30	966	965	98.0	98.9	8.1	9.0	-0.8	1.4	0.99
131	2016	icf	26	634	662	101.9	99.3	9.4	8.0	2.6	5.2	0.83
132	2017	icf	29	1003	792	98.5	98.8	10.4	7.4	-0.3	7.4	0.70
133	2018	icf	20	648	869	98.6	97.8	10.3	8.2	0.8	6.6	0.77
134	2019	icf	22	449	489	102.0	100.4	6.4	8.1	1.5	4.4	0.84
135	2010	ifl0	55	172	185	91.5	92.1	12.0	10.5	-0.6	2.8	0.98
136	2011	ifl0	47	147	172	91.4	91.3	14.5	13.6	0.1	3.2	0.98
137	2012	ifl0	47	306	583	92.6	93.0	14.7	14.3	-0.4	3.8	0.97
138	2013	ifl0	50	225	451	95.4	96.3	11.0	10.8	-0.9	3.5	0.95
139	2014	ifl0	36	395	515	95.6	95.7	12.1	11.0	-0.1	3.7	0.95
140	2015	ifl0	30	1006	1023	100.1	101.2	15.5	15.0	-1.1	3.9	0.97
141	2016	ifl0	26	686	730	97.3	96.3	12.4	8.8	1.0	10.5	0.56
142	2017	ifl0	29	1211	975	97.8	99.2	15.9	10.9	-1.4	10.1	0.78
143	2018	ifl0	21	896	1203	98.3	97.5	12.3	6.5	0.8	10.4	0.52
144	2019	ifl0	30	1309	1082	104.0	101.6	14.5	9.6	2.4	10.8	0.67
145	2020	ifl0	14	681	657	101.4	97.6	8.7	4.4	3.8	8.1	0.40
146	2010	ifl1	55	167	181	95.2	95.1	10.2	9.7	0.1	1.9	0.98
147	2011	ifl1	47	141	165	96.2	96.1	12.3	12.2	0.1	2.1	0.99
148	2012	ifl1	47	291	544	95.4	95.3	12.0	11.8	0.1	2.3	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
149	2013	ifl1	50	221	427	95.0	96.0	9.8	10.1	-1.0	2.2	0.98
150	2014	ifl1	36	383	490	97.6	98.6	13.0	12.7	-1.0	2.5	0.98
151	2015	ifl1	30	930	931	99.7	100.6	10.9	11.3	-0.9	2.6	0.97
152	2016	ifl1	26	612	640	98.5	97.7	13.4	10.8	0.8	8.8	0.76
153	2017	ifl1	29	977	774	100.6	100.4	13.7	9.7	0.2	10.3	0.66
154	2018	ifl1	20	641	857	97.0	97.4	14.3	9.4	-0.4	10.2	0.70
155	2019	ifl1	23	444	488	107.7	104.9	10.1	10.6	2.7	5.0	0.88
156	2010	ifl2	55	128	142	96.0	96.3	10.2	9.9	-0.3	1.7	0.99
157	2011	ifl2	47	109	130	98.1	97.8	12.7	12.6	0.3	1.7	0.99
158	2012	ifl2	47	225	417	96.0	95.7	11.6	11.3	0.3	1.9	0.99
159	2013	ifl2	49	176	328	96.7	97.3	10.4	10.9	-0.6	2.1	0.98
160	2014	ifl2	36	304	387	99.0	99.8	12.0	12.1	-0.8	1.8	0.99
161	2015	ifl2	30	710	705	99.3	99.7	11.4	11.6	-0.4	1.9	0.99
162	2016	ifl2	26	478	498	99.5	97.9	13.7	11.2	1.6	8.4	0.79
163	2017	ifl2	29	595	469	99.9	99.8	15.1	9.8	0.1	9.9	0.76
164	2018	ifl2	13	259	291	99.0	96.3	13.9	10.2	2.7	9.9	0.70
165	2010	ifl3	55	87	100	96.3	96.9	10.0	9.6	-0.6	1.8	0.98
166	2011	ifl3	47	74	85	99.1	98.8	12.4	12.2	0.3	1.4	0.99
167	2012	ifl3	47	151	270	95.8	95.6	11.4	10.9	0.2	2.2	0.98
168	2013	ifl3	49	120	220	98.0	98.4	10.7	10.8	-0.4	1.9	0.98
169	2014	ifl3	36	210	272	100.5	100.8	10.9	10.9	-0.3	1.9	0.98
170	2015	ifl3	30	449	435	99.9	100.1	12.2	12.0	-0.2	2.3	0.98
171	2016	ifl3	26	293	297	100.7	98.8	13.9	10.5	1.8	9.0	0.76
172	2017	ifl3	24	152	125	100.3	99.2	15.0	9.7	1.1	8.8	0.83
173	2010	ifl	55	201	215	95.8	96.1	10.0	9.6	-0.3	1.7	0.99
174	2011	ifl	47	172	200	97.9	97.6	12.3	12.2	0.3	1.6	0.99
175	2012	ifl	47	351	660	95.6	95.5	11.7	11.2	0.1	2.0	0.98
176	2013	ifl	50	262	514	96.4	97.1	10.4	10.6	-0.7	1.9	0.98
177	2014	ifl	36	454	585	99.2	99.8	11.8	11.8	-0.6	1.9	0.99
178	2015	ifl	30	1130	1139	99.6	100.2	11.4	11.5	-0.6	2.2	0.98
179	2016	ifl	26	750	792	99.7	98.2	13.5	10.8	1.5	8.5	0.77
180	2017	ifl	29	1299	1038	100.4	100.2	14.5	9.7	0.2	9.5	0.76
181	2018	ifl	21	938	1260	97.3	96.4	12.7	9.4	1.0	8.4	0.75
182	2019	ifl	30	1324	1098	104.2	102.3	10.9	10.3	1.9	4.2	0.92
183	2020	ifl	14	681	657	106.6	101.5	11.1	7.3	5.1	6.8	0.81
184	2010	ais0	55	169	181	92.9	93.1	12.3	10.7	-0.1	3.0	0.97
185	2011	ais0	47	144	168	91.2	91.2	13.2	12.4	0.0	2.9	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
186	2012	ais0	47	301	572	94.0	94.3	12.0	11.7	-0.3	3.3	0.96
187	2013	ais0	50	222	441	95.0	95.6	10.8	10.4	-0.5	3.4	0.95
188	2014	ais0	36	388	508	94.8	95.0	13.2	12.4	-0.1	3.4	0.97
189	2015	ais0	30	983	1001	102.1	102.0	14.4	14.4	0.2	3.6	0.97
190	2016	ais0	26	673	716	97.0	94.1	12.9	10.5	2.9	10.0	0.65
191	2017	ais0	29	1190	964	98.4	98.1	15.4	10.7	0.3	9.7	0.78
192	2018	ais0	21	889	1195	96.1	95.2	10.7	9.1	0.9	10.4	0.46
193	2019	ais0	30	1317	1086	103.0	100.3	16.4	11.4	2.7	10.9	0.75
194	2020	ais0	14	688	664	97.5	94.3	10.5	4.5	3.2	9.4	0.45
195	2010	ais1	55	164	178	97.3	97.3	9.5	9.2	0.0	1.9	0.98
196	2011	ais1	47	138	161	97.3	97.0	11.6	11.4	0.3	2.1	0.98
197	2012	ais1	47	288	538	96.6	96.3	11.2	10.9	0.3	1.7	0.99
198	2013	ais1	50	219	422	96.3	96.8	8.5	9.2	-0.5	2.3	0.97
199	2014	ais1	36	379	485	98.6	98.9	13.5	13.0	-0.3	2.0	0.99
200	2015	ais1	30	919	919	101.2	101.1	11.1	10.7	0.1	2.5	0.97
201	2016	ais1	26	609	637	98.2	96.9	12.6	10.6	1.3	7.7	0.79
202	2017	ais1	29	965	765	100.6	100.1	12.4	9.5	0.5	8.4	0.74
203	2018	ais1	20	634	849	96.4	96.6	12.9	9.9	-0.2	10.5	0.61
204	2019	ais1	22	423	471	107.1	103.6	11.2	9.8	3.5	5.6	0.87
205	2010	ais2	55	125	139	97.5	97.8	8.6	8.4	-0.3	1.6	0.98
206	2011	ais2	47	106	126	98.7	98.4	12.0	11.5	0.3	1.6	0.99
207	2012	ais2	47	221	409	97.0	96.6	11.3	10.9	0.4	1.7	0.99
208	2013	ais2	49	173	324	98.3	98.5	8.5	9.0	-0.2	2.1	0.97
209	2014	ais2	36	300	382	99.4	99.7	11.5	11.7	-0.4	1.8	0.99
210	2015	ais2	30	700	696	100.3	100.2	12.2	12.4	0.1	1.8	0.99
211	2016	ais2	26	472	493	99.0	96.5	12.2	10.3	2.6	7.9	0.77
212	2017	ais2	29	574	455	100.3	99.8	13.1	9.8	0.5	7.7	0.81
213	2018	ais2	13	220	249	96.7	94.6	11.7	9.7	2.1	10.8	0.50
214	2010	ais3	55	86	99	97.2	97.6	7.9	7.6	-0.4	1.5	0.98
215	2011	ais3	47	73	83	99.3	99.0	10.4	10.2	0.3	1.2	0.99
216	2012	ais3	47	148	263	97.2	97.0	10.7	10.3	0.2	1.7	0.99
217	2013	ais3	49	117	215	99.1	99.1	7.8	7.9	-0.1	1.7	0.98
218	2014	ais3	36	207	269	99.8	99.8	9.9	9.8	0.0	1.6	0.99
219	2015	ais3	30	438	424	101.3	101.1	11.1	11.2	0.2	1.7	0.99
220	2016	ais3	26	284	287	99.5	96.7	11.0	8.8	2.8	8.1	0.69
221	2017	ais3	22	147	114	100.1	98.8	13.5	9.5	1.4	7.6	0.84
222	2010	ais	55	200	214	97.2	97.5	8.2	8.0	-0.3	1.3	0.99

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
223	2011	ais	47	171	197	98.4	98.2	11.0	10.8	0.2	1.4	0.99
224	2012	ais	47	350	658	96.8	96.6	10.9	10.6	0.2	1.5	0.99
225	2013	ais	50	262	512	97.7	98.0	8.0	8.4	-0.3	1.9	0.97
226	2014	ais	36	453	584	99.3	99.4	11.2	11.1	0.0	1.6	0.99
227	2015	ais	30	1126	1133	100.9	100.9	11.3	11.3	0.0	1.7	0.99
228	2016	ais	26	749	791	99.0	96.6	11.5	9.7	2.4	7.8	0.74
229	2017	ais	29	1297	1036	100.9	100.2	12.6	9.3	0.8	7.4	0.81
230	2018	ais	21	941	1265	95.9	95.1	10.7	9.4	0.8	8.9	0.62
231	2019	ais	30	1334	1104	102.7	100.9	10.8	8.9	1.8	4.9	0.90
232	2020	ais	14	688	664	101.6	97.6	9.7	7.8	4.0	5.2	0.84
233	2010	fert	55	174	189	95.3	95.6	10.0	9.5	-0.4	1.7	0.99
234	2011	fert	47	147	174	96.7	96.6	12.4	12.2	0.1	1.6	0.99
235	2012	fert	47	303	566	94.8	94.8	12.0	11.5	0.0	2.2	0.98
236	2013	fert	50	230	444	96.2	96.9	10.2	10.5	-0.7	2.1	0.98
237	2014	fert	36	399	509	98.5	98.9	12.0	11.7	-0.4	2.0	0.99
238	2015	fert	30	966	965	99.7	100.4	12.0	11.9	-0.7	2.1	0.98
239	2016	fert	26	634	662	99.4	97.4	13.4	10.9	2.0	8.3	0.78
240	2017	fert	29	1003	792	100.0	99.9	14.4	9.8	0.1	9.4	0.76
241	2018	fert	20	648	869	97.5	96.5	12.8	9.2	1.0	9.1	0.70
242	2019	fert	22	449	489	106.3	103.2	11.7	11.1	3.0	4.2	0.93
243	2010	interval	55	174	189	96.9	97.2	9.3	8.9	-0.3	1.7	0.98
244	2011	interval	47	147	174	97.7	97.7	12.1	12.1	-0.1	1.5	0.99
245	2012	interval	47	303	566	95.5	95.6	11.3	11.1	0.0	1.8	0.99
246	2013	interval	50	230	444	97.0	97.5	10.8	11.0	-0.5	1.8	0.99
247	2014	interval	36	399	509	98.8	99.4	12.0	12.0	-0.6	1.6	0.99
248	2015	interval	30	966	965	98.8	99.7	10.3	10.7	-0.9	1.9	0.98
249	2016	interval	26	634	662	100.6	98.5	12.9	10.4	2.1	7.6	0.81
250	2017	interval	29	1003	792	99.5	99.5	13.5	8.6	0.0	9.1	0.74
251	2018	interval	20	648	869	98.1	97.0	12.5	9.0	1.1	7.9	0.78
252	2019	interval	22	449	489	104.8	102.5	9.6	10.2	2.2	3.4	0.94

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

Obs	diff	d_cr0	d_cr	d_nrr0	d_nrr	d_icf	d_ifl0	d_ifl	d_ais0	d_ais	d_fert	d_interval
1	-29	.	.	1	.	.	.	.	.	.	.	.
2	-27	.	.	.	.	.	1	.	.	.	.	.
3	-22	.	.	.	.	.	1	.	1	.	.	.
4	-21	1	.	.	.	.	.	.	1	.	.	.
5	-20	.	.	.	.	.	.	1	1	.	.	.
6	-19	.	.	1	.	.	1	.	1	.	.	.
7	-18	2	.	1	.	.	2	.	.	.	.	1
8	-17	.	.	.	.	.	1	.	2	.	1	1
9	-16	.	.	3	.	1	1	.	.	1	.	.
10	-15	2	.	.	.	.	2	.	2	.	.	.
11	-14	4	3	.	1	.	1	1	.	1	.	.
12	-13	1	1	4	.	.	3	.	2	.	2	1
13	-12	1	1	4	.	1	2	4	.	1	1	1
14	-11	3	.	4	2	.	3	4	1	2	3	2
15	-10	3	2	5	2	2	2	2	1	1	3	3
16	-9	1	2	3	2	2	4	3	2	3	4	2
17	-8	1	4	.	6	1	1	2	4	2	3	1
18	-7	2	4	4	1	2	2	1	6	5	2	1
19	-6	3	2	5	2	1	5	1	2	3	.	3
20	-5	2	4	8	3	7	7	3	7	6	2	.
21	-4	7	4	7	6	10	5	7	10	3	3	5
22	-3	7	6	7	11	1	8	11	5	4	10	13
23	-2	6	11	5	8	15	8	10	9	10	9	10
24	-1	4	13	6	11	15	8	11	5	15	9	10
25	0	4	13	6	19	14	12	12	10	16	15	13
26	1	10	12	9	14	11	6	9	3	14	9	9
27	2	10	6	10	10	4	7	13	7	4	7	7
28	3	10	5	9	7	3	4	9	10	10	8	12
29	4	8	5	5	6	8	3	7	11	5	4	9
30	5	7	4	4	9	5	8	3	3	8	7	1
31	6	5	5	4	10	4	3	7	3	6	2	4
32	7	5	5	7	4	3	6	4	6	4	3	.
33	8	2	4	.	5	4	3	3	4	3	2	1
34	9	2	6	3	4	5	6	2	6	2	2	3
35	10	3	1	2	.	1	2	5	2	6	3	2
36	11	1	4	9	2	4	2	3	2	3	2	3
37	12	2	1	2	1	1	4	2	5	5	2	2

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

Obs	diff	d_cr0	d_cr	d_nrr0	d_nrr	d_icf	d_ifl0	d_ifl	d_ais0	d_ais	d_fert	d_interval
38	13	1	2	2	.	1	4	.	1	2	.	1
39	14	3	.	2	2	.	2	4	4	1	2	2
40	15	5	6	1	1	1	1	1	2	4	1	.
41	16	3	2	1	1	.	3	1	2	.	1	1
42	17	4	.	.	.	.	1	2	.	.	2	1
43	18	1	2	2	.	.	1	.	1	.	1	1
44	19	2	2	1	.	.	.	1	.	.	.	.
45	20	1	1	1	.	.	2	.	2	.	1	.
46	21	3	3	.	.	.	.	1	1	.	.	1
47	22	1	1	1	.	.	.	.	1	.	1	.
48	23	.	1	.	.	.	1	.	.	.	.	.
49	25	2	.	.	.	.	.	.	1	.	.	.
50	26	1	.	.	.	.	.	.	.	.	.	.
51	27	1	.	1	.	.	.	.	.	.	.	.
52	28	.	.	.	.	.	1	.	.	.	.	.
53	33	.	.	.	.	.	.	.	1	.	.	.
54	36	1	.	.	.	.	.	.	.	.	.	.

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

Obs	diff	p_cr0	p_cr	p_nrr0	p_nrr	p_icf	p_ifl0	p_ifl	p_ais0	p_ais	p_fert	p_interval
1	-29	.	.	1	.	.	.	.	.	.	.	.
2	-27	.	.	.	.	.	1	.	.	.	.	.
3	-22	.	.	.	.	.	1	.	1	.	.	.
4	-21	1	.	.	.	.	.	.	1	.	.	.
5	-20	.	.	.	.	.	.	1	1	.	.	.
6	-19	.	.	1	.	.	1	.	1	.	.	.
7	-18	1	.	1	.	.	1	.	.	.	.	1
8	-17	.	.	.	.	.	1	.	1	.	1	1
9	-16	.	.	2	.	1	1	.	.	1	.	.
10	-15	1	.	.	.	.	1	.	1	.	.	.
11	-14	3	2	.	1	.	1	1	.	1	.	.
12	-13	1	1	3	.	.	2	.	1	.	2	1
13	-12	1	1	3	.	1	1	3	.	1	1	1
14	-11	2	.	3	1	.	2	3	1	1	2	2
15	-10	2	1	3	1	2	1	1	1	1	2	2
16	-9	1	1	2	1	2	3	2	1	2	3	2
17	-8	1	3	.	4	1	1	1	3	1	2	1
18	-7	1	3	3	1	2	1	1	4	3	2	1
19	-6	2	1	3	1	1	3	1	1	2	.	2
20	-5	1	3	5	2	6	5	2	5	4	2	.
21	-4	5	3	5	4	8	3	5	7	2	2	4
22	-3	5	4	5	7	1	5	7	3	3	8	10
23	-2	4	7	3	5	12	5	7	6	7	7	8
24	-1	3	9	4	7	12	5	7	3	10	7	8
25	0	3	9	4	13	11	8	8	7	11	12	10
26	1	7	8	6	9	9	4	6	2	9	7	7
27	2	7	4	7	7	3	5	9	5	3	6	6
28	3	7	3	6	5	2	3	6	7	7	6	9
29	4	5	3	3	4	6	2	5	7	3	3	7
30	5	5	3	3	6	4	5	2	2	5	6	1
31	6	3	3	3	7	3	2	5	2	4	2	3
32	7	3	3	5	3	2	4	3	4	3	2	.
33	8	1	3	.	3	3	2	2	3	2	2	1
34	9	1	4	2	3	4	4	1	4	1	2	2
35	10	2	1	1	.	1	1	3	1	4	2	2
36	11	1	3	6	1	3	1	2	1	2	2	2

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

Obs	diff	p_cr0	p_cr	p_nrr0	p_nrr	p_icf	p_ifl0	p_ifl	p_ais0	p_ais	p_fert	p_interval
37	12	1	1	1	1	1	3	1	3	3	2	2
38	13	1	1	1	.	1	3	.	1	1	.	1
39	14	2	.	1	1	.	1	3	3	1	2	2
40	15	3	4	1	1	1	1	1	1	3	1	.
41	16	2	1	1	1	.	2	1	1	.	1	1
42	17	3	.	.	.	.	1	1	.	.	2	1
43	18	1	1	1	.	.	1	.	1	.	1	1
44	19	1	1	1	.	.	.	1	.	.	.	.
45	20	1	1	1	.	.	1	.	1	.	1	.
46	21	2	2	.	.	.	.	1	1	.	.	1
47	22	1	1	1	.	.	.	.	1	.	1	.
48	23	.	1	.	.	.	1	.	.	.	.	.
49	25	1	.	.	.	.	.	.	1	.	.	.
50	26	1	.	.	.	.	.	.	.	.	.	.
51	27	1	.	1	.	.	.	.	.	.	.	.
52	28	.	.	.	.	.	1	.	.	.	.	.
53	33	.	.	.	.	.	.	.	1	.	.	.
54	36	1	.	.	.	.	.	.	.	.	.	.

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	cr0	55	182	195	90.6	90.3	11.5	10.4	0.3	2.4	0.98
2	2011	cr0	47	155	180	88.5	88.5	12.8	12.5	0.1	2.0	0.99
3	2012	cr0	47	321	612	91.7	92.0	14.2	13.9	-0.3	2.3	0.99
4	2013	cr0	50	238	479	94.6	94.8	11.6	11.7	-0.2	2.4	0.98
5	2014	cr0	36	417	546	94.2	94.1	12.4	12.0	0.1	2.9	0.97
6	2015	cr0	30	1056	1078	102.1	102.1	16.8	16.4	0.1	3.7	0.98
7	2016	cr0	26	716	761	97.6	93.3	16.1	8.7	4.3	12.4	0.64
8	2017	cr0	29	1265	1018	101.3	99.7	18.3	9.3	1.6	15.6	0.53
9	2018	cr0	21	927	1245	100.4	97.1	14.0	7.5	3.3	11.7	0.55
10	2019	cr0	30	1255	1082	109.9	99.4	17.6	6.9	10.5	17.0	0.28
11	2020	cr0	12	413	454	105.0	98.2	9.0	4.2	6.8	10.6	-0.19
12	2010	cr1	55	171	186	94.7	94.6	9.5	9.1	0.1	1.4	0.99
13	2011	cr1	47	144	170	95.0	94.8	11.0	11.0	0.1	1.5	0.99
14	2012	cr1	47	299	556	95.2	95.6	10.6	10.6	-0.3	1.7	0.99
15	2013	cr1	50	227	439	95.0	95.4	8.7	9.1	-0.4	2.0	0.98
16	2014	cr1	36	393	502	97.7	97.8	12.0	11.8	-0.1	1.9	0.99
17	2015	cr1	30	947	949	99.8	101.2	12.1	12.2	-1.5	2.9	0.97
18	2016	cr1	26	625	651	98.3	94.4	13.2	6.9	4.0	10.6	0.61
19	2017	cr1	29	974	767	102.3	100.0	14.6	8.3	2.3	12.7	0.50
20	2018	cr1	20	619	842	100.1	96.7	13.6	7.1	3.4	12.3	0.44
21	2019	cr1	20	309	374	110.9	97.7	14.7	7.3	13.2	15.3	0.17
22	2010	cr2	55	130	145	95.7	95.8	9.4	9.1	0.0	1.2	0.99
23	2011	cr2	47	110	132	96.2	96.1	11.1	10.9	0.0	1.5	0.99
24	2012	cr2	47	228	416	95.3	95.4	10.8	10.6	-0.1	1.8	0.99
25	2013	cr2	50	175	332	96.2	96.5	9.1	9.3	-0.3	1.9	0.98
26	2014	cr2	36	309	393	98.6	98.7	11.5	11.4	-0.1	1.9	0.99
27	2015	cr2	30	716	708	99.2	100.5	12.8	13.0	-1.3	2.3	0.98
28	2016	cr2	26	482	503	99.2	94.7	12.5	6.6	4.5	10.2	0.59
29	2017	cr2	29	523	420	102.3	99.8	14.4	8.7	2.6	12.1	0.55
30	2010	cr3	55	88	101	96.4	96.4	8.8	8.7	0.0	1.0	0.99
31	2011	cr3	47	76	87	97.3	97.4	10.2	10.2	-0.1	1.4	0.99
32	2012	cr3	47	150	261	95.7	95.7	10.1	9.8	0.0	1.6	0.99
33	2013	cr3	49	122	223	97.0	97.4	8.6	8.6	-0.4	1.8	0.98
34	2014	cr3	36	214	277	99.1	99.3	10.9	10.6	-0.2	1.7	0.99
35	2015	cr3	30	442	420	99.1	100.5	12.1	12.0	-1.4	2.2	0.98
36	2016	cr3	26	271	274	99.8	95.4	11.4	6.0	4.5	9.4	0.56
37	2017	cr3	18	118	88	100.4	98.4	14.3	9.2	1.9	10.9	0.65

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	2010	cr	55	204	219	95.6	95.6	9.4	9.2	0.0	1.2	0.99
39	2011	cr	47	175	202	96.1	96.2	11.0	10.9	0.0	1.5	0.99
40	2012	cr	47	355	667	95.3	95.3	10.7	10.6	-0.1	1.7	0.99
41	2013	cr	50	267	524	96.0	96.3	9.0	9.2	-0.3	1.9	0.98
42	2014	cr	36	461	595	98.4	98.7	11.7	11.4	-0.2	1.7	0.99
43	2015	cr	30	1146	1155	99.3	100.6	12.6	12.8	-1.3	2.6	0.98
44	2016	cr	26	759	802	99.1	94.7	12.6	6.6	4.4	10.2	0.58
45	2017	cr	29	1317	1050	102.4	99.8	14.4	8.6	2.6	12.0	0.55
46	2018	cr	21	948	1274	100.3	96.6	12.3	6.2	3.7	11.7	0.35
47	2019	cr	30	1259	1086	107.0	98.1	13.2	7.0	9.0	13.4	0.23
48	2020	cr	12	413	454	104.7	98.4	6.7	4.7	6.3	9.2	-0.28
49	2010	nrr0	55	177	190	94.6	94.3	10.8	9.8	0.3	2.4	0.98
50	2011	nrr0	47	152	177	92.4	92.3	11.3	10.6	0.1	2.4	0.98
51	2012	nrr0	47	314	598	95.8	95.9	10.2	9.8	-0.1	2.3	0.97
52	2013	nrr0	50	231	464	97.5	98.2	11.5	11.2	-0.7	2.6	0.97
53	2014	nrr0	36	406	530	94.8	94.9	12.1	11.2	-0.2	3.3	0.96
54	2015	nrr0	30	1032	1052	101.4	101.6	14.8	15.2	-0.2	3.9	0.97
55	2016	nrr0	26	700	745	96.0	95.2	14.2	7.7	0.8	12.1	0.53
56	2017	nrr0	29	1239	998	100.4	99.9	14.0	8.1	0.5	12.5	0.46
57	2018	nrr0	21	912	1224	97.4	98.3	11.6	5.1	-1.0	10.2	0.47
58	2019	nrr0	30	1332	1101	104.5	99.8	13.9	5.8	4.7	14.4	0.12
59	2020	nrr0	14	688	664	101.9	99.9	9.1	3.0	2.0	9.2	0.13
60	2010	nrr1	55	167	181	96.5	96.1	8.7	8.7	0.4	1.4	0.99
61	2011	nrr1	47	140	165	99.5	99.2	8.2	8.0	0.3	1.6	0.98
62	2012	nrr1	47	291	544	98.3	98.2	8.8	8.7	0.0	1.8	0.98
63	2013	nrr1	50	221	427	97.6	98.0	8.0	8.3	-0.4	1.8	0.98
64	2014	nrr1	36	383	490	99.5	99.8	10.1	9.6	-0.4	2.2	0.98
65	2015	nrr1	30	928	929	100.6	100.2	10.1	10.2	0.4	2.9	0.96
66	2016	nrr1	26	611	639	95.4	95.9	10.7	5.7	-0.5	9.6	0.45
67	2017	nrr1	29	974	772	102.2	100.8	10.9	7.2	1.5	8.6	0.61
68	2018	nrr1	20	639	854	97.3	97.9	11.7	5.2	-0.6	10.4	0.46
69	2019	nrr1	23	439	482	104.0	100.0	7.9	5.8	4.0	7.6	0.41
70	2010	nrr2	55	126	141	98.4	98.3	8.3	8.4	0.0	1.0	0.99
71	2011	nrr2	47	108	129	100.2	100.1	8.2	8.1	0.1	1.5	0.98
72	2012	nrr2	47	223	413	98.4	98.1	9.9	9.8	0.3	1.8	0.98
73	2013	nrr2	49	175	328	100.3	100.2	8.2	8.4	0.1	1.8	0.98
74	2014	nrr2	36	302	384	100.3	100.4	9.0	8.7	-0.1	1.8	0.98

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	2015	nrr2	30	706	702	99.2	99.4	13.4	13.7	-0.1	2.1	0.99
76	2016	nrr2	26	474	495	97.3	96.1	9.8	5.0	1.2	9.0	0.39
77	2017	nrr2	29	588	464	102.0	100.9	12.8	9.1	1.1	9.0	0.71
78	2018	nrr2	13	256	287	97.6	96.3	10.5	4.6	1.3	9.1	0.50
79	2010	nrr3	55	86	99	97.7	97.7	7.1	7.0	0.0	0.9	0.99
80	2011	nrr3	47	74	84	100.8	100.8	7.4	7.3	0.0	1.3	0.98
81	2012	nrr3	47	150	268	98.6	98.4	8.4	8.0	0.1	1.5	0.98
82	2013	nrr3	49	118	217	99.4	99.5	7.0	6.7	-0.1	1.5	0.98
83	2014	nrr3	36	208	271	99.7	99.8	8.9	8.6	-0.1	1.4	0.99
84	2015	nrr3	30	442	429	100.0	100.1	11.8	11.7	-0.1	2.0	0.99
85	2016	nrr3	26	288	292	98.6	96.8	9.3	5.6	1.8	7.9	0.53
86	2017	nrr3	23	155	122	101.7	101.0	14.0	8.9	0.7	8.6	0.81
87	2010	nrr	55	202	217	97.4	97.3	7.7	7.8	0.1	0.9	0.99
88	2011	nrr	47	173	201	100.4	100.1	7.8	8.0	0.3	1.4	0.98
89	2012	nrr	47	353	663	98.4	98.2	9.1	8.8	0.1	1.5	0.99
90	2013	nrr	50	264	518	99.0	99.1	7.5	7.5	-0.1	1.6	0.98
91	2014	nrr	36	456	589	99.8	100.0	9.3	8.9	-0.2	1.5	0.99
92	2015	nrr	30	1137	1146	100.0	99.9	12.1	12.1	0.1	2.0	0.99
93	2016	nrr	26	754	797	97.2	96.1	9.7	5.3	1.1	8.7	0.46
94	2017	nrr	29	1310	1046	102.3	101.2	12.7	8.2	1.1	8.6	0.74
95	2018	nrr	21	947	1271	98.5	97.6	9.4	5.0	0.9	8.4	0.46
96	2019	nrr	30	1345	1114	101.2	99.6	6.8	5.9	1.6	5.9	0.57
97	2020	nrr	14	688	664	101.6	98.6	4.1	4.0	3.1	3.9	0.53
98	2010	icf1	55	168	182	100.4	100.5	8.5	8.7	-0.1	1.2	0.99
99	2011	icf1	47	142	166	97.5	97.8	9.0	8.9	-0.3	1.4	0.99
100	2012	icf1	47	293	547	96.6	96.6	10.3	10.2	0.0	1.5	0.99
101	2013	icf1	50	222	430	98.5	98.6	10.1	10.2	-0.1	1.4	0.99
102	2014	icf1	36	386	493	97.6	97.6	10.9	11.0	0.0	1.7	0.99
103	2015	icf1	30	935	936	98.3	98.9	7.9	8.4	-0.6	1.8	0.98
104	2016	icf1	26	616	644	102.6	99.7	10.5	6.1	2.9	8.5	0.59
105	2017	icf1	29	981	777	98.3	98.4	10.8	5.8	-0.1	9.9	0.42
106	2018	icf1	20	643	862	99.7	99.3	10.0	6.0	0.4	8.5	0.53
107	2019	icf1	22	449	489	101.0	97.2	6.8	4.3	3.8	5.9	0.51
108	2010	icf2	55	128	143	100.5	100.5	8.2	8.3	0.0	1.0	0.99
109	2011	icf2	47	109	130	98.9	99.3	9.2	9.2	-0.4	1.2	0.99
110	2012	icf2	47	226	418	97.1	97.1	10.2	10.2	0.0	1.4	0.99
111	2013	icf2	49	177	330	98.0	98.1	10.1	9.9	-0.1	1.5	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
112	2014	icf2	36	305	388	97.8	98.1	11.0	11.1	-0.3	1.7	0.99
113	2015	icf2	30	713	708	98.5	99.2	9.2	10.2	-0.7	1.9	0.99
114	2016	icf2	26	480	500	102.5	98.9	10.0	6.7	3.6	8.0	0.60
115	2017	icf2	29	590	466	98.5	98.4	11.6	6.2	0.1	10.5	0.43
116	2018	icf2	13	232	260	100.6	100.2	11.4	7.5	0.4	10.5	0.44
117	2010	icf3	55	88	101	101.2	101.2	8.4	8.4	-0.1	0.9	0.99
118	2011	icf3	47	75	85	99.0	99.2	9.2	9.1	-0.3	1.2	0.99
119	2012	icf3	47	151	269	96.9	97.0	10.2	10.2	0.0	1.3	0.99
120	2013	icf3	49	121	221	99.3	99.4	10.1	10.0	-0.1	1.5	0.99
121	2014	icf3	36	211	273	98.4	98.5	10.9	10.9	-0.1	1.6	0.99
122	2015	icf3	30	450	435	98.1	98.6	9.6	10.3	-0.5	1.5	0.99
123	2016	icf3	26	292	296	102.8	99.8	9.5	6.7	3.0	7.6	0.61
124	2017	icf3	22	155	119	97.8	97.3	10.0	7.1	0.5	9.8	0.39
125	2010	icf	55	174	189	100.7	100.9	8.2	8.3	-0.1	1.0	0.99
126	2011	icf	47	147	174	98.4	98.8	8.9	8.8	-0.4	1.2	0.99
127	2012	icf	47	303	566	97.0	96.9	10.0	9.9	0.1	1.4	0.99
128	2013	icf	50	230	444	98.8	98.8	9.8	9.7	0.0	1.4	0.99
129	2014	icf	36	399	509	98.0	98.1	10.6	10.8	-0.1	1.4	0.99
130	2015	icf	30	966	965	98.3	98.8	8.6	9.3	-0.4	1.5	0.99
131	2016	icf	26	634	662	102.8	99.6	9.7	6.3	3.2	7.9	0.59
132	2017	icf	29	1003	792	98.2	98.1	10.7	6.2	0.1	9.9	0.40
133	2018	icf	20	648	869	100.0	99.9	9.5	6.1	0.1	8.3	0.51
134	2019	icf	22	449	489	100.0	96.5	5.8	4.3	3.4	5.6	0.40
135	2010	ifl0	55	172	185	93.3	93.3	10.6	9.7	0.0	2.0	0.98
136	2011	ifl0	47	147	172	91.0	91.1	12.3	12.1	-0.1	2.3	0.98
137	2012	ifl0	47	306	583	93.6	93.7	14.4	14.0	-0.1	2.3	0.99
138	2013	ifl0	50	225	451	96.7	97.2	10.9	10.5	-0.5	2.5	0.97
139	2014	ifl0	36	395	515	95.5	95.1	11.3	10.7	0.4	3.4	0.96
140	2015	ifl0	30	1006	1023	100.4	100.9	15.5	15.1	-0.5	3.9	0.97
141	2016	ifl0	26	686	730	98.3	96.3	13.7	7.6	2.0	10.9	0.61
142	2017	ifl0	29	1211	975	99.1	99.2	16.6	9.0	-0.1	13.8	0.55
143	2018	ifl0	21	896	1203	99.1	98.2	13.1	5.8	0.9	11.8	0.43
144	2019	ifl0	30	1309	1082	104.9	99.5	14.4	5.9	5.3	14.6	0.17
145	2020	ifl0	14	681	657	102.7	98.8	7.8	3.1	3.9	9.4	-0.39
146	2010	ifl1	55	167	181	96.7	96.5	9.6	9.3	0.1	1.4	0.99
147	2011	ifl1	47	141	165	96.9	96.8	11.6	11.6	0.0	1.4	0.99
148	2012	ifl1	47	291	544	95.7	95.9	12.3	12.2	-0.2	2.0	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
149	2013	ifl1	50	221	427	95.7	96.2	9.8	9.9	-0.5	2.0	0.98
150	2014	ifl1	36	383	490	97.4	97.8	13.4	13.2	-0.4	2.3	0.98
151	2015	ifl1	30	930	931	99.3	100.3	11.4	11.6	-1.0	2.7	0.97
152	2016	ifl1	26	612	640	97.9	95.8	13.8	8.3	2.2	11.2	0.59
153	2017	ifl1	29	977	774	100.6	99.5	14.3	7.1	1.1	12.9	0.44
154	2018	ifl1	20	641	857	96.8	97.9	15.1	7.2	-1.2	12.9	0.52
155	2019	ifl1	23	444	488	105.3	97.7	9.5	6.3	7.6	9.0	0.41
156	2010	ifl2	55	128	142	97.7	97.8	9.8	9.7	-0.1	1.2	0.99
157	2011	ifl2	47	109	130	98.8	98.9	11.8	11.7	-0.1	1.5	0.99
158	2012	ifl2	47	225	417	96.4	96.2	11.3	11.1	0.2	1.8	0.99
159	2013	ifl2	49	176	328	97.3	97.3	10.4	10.4	0.0	2.1	0.98
160	2014	ifl2	36	304	387	99.1	99.4	12.6	12.7	-0.4	2.0	0.99
161	2015	ifl2	30	710	705	98.5	99.1	12.3	12.5	-0.5	2.2	0.98
162	2016	ifl2	26	478	498	99.3	96.2	14.0	8.1	3.1	11.4	0.58
163	2017	ifl2	29	595	469	100.3	99.4	15.5	7.6	0.9	13.2	0.53
164	2018	ifl2	13	259	291	99.9	97.5	14.0	6.1	2.5	12.2	0.50
165	2010	ifl3	55	87	100	98.2	98.5	9.6	9.5	-0.3	1.4	0.99
166	2011	ifl3	47	74	85	99.8	100.0	11.3	11.2	-0.2	1.5	0.99
167	2012	ifl3	47	151	270	96.1	96.0	10.9	10.7	0.1	1.9	0.99
168	2013	ifl3	49	120	220	98.0	98.1	10.9	10.7	-0.1	1.9	0.98
169	2014	ifl3	36	210	272	100.0	100.1	11.8	11.6	-0.1	1.9	0.99
170	2015	ifl3	30	449	435	98.3	99.0	13.3	13.2	-0.7	2.5	0.98
171	2016	ifl3	26	293	297	100.5	97.1	14.0	7.8	3.5	12.2	0.49
172	2017	ifl3	24	152	125	100.2	99.0	15.7	9.1	1.2	11.5	0.69
173	2010	ifl	55	201	215	97.6	97.7	9.5	9.4	-0.1	1.2	0.99
174	2011	ifl	47	172	200	98.6	98.7	11.5	11.5	-0.1	1.5	0.99
175	2012	ifl	47	351	660	96.0	96.0	11.3	11.2	-0.1	1.7	0.99
176	2013	ifl	50	262	514	96.9	97.1	10.4	10.4	-0.2	1.9	0.98
177	2014	ifl	36	454	585	98.9	99.2	12.5	12.4	-0.3	1.9	0.99
178	2015	ifl	30	1130	1139	98.6	99.4	12.5	12.5	-0.8	2.3	0.98
179	2016	ifl	26	750	792	99.5	96.4	13.7	8.1	3.1	11.4	0.56
180	2017	ifl	29	1299	1038	100.4	99.4	15.1	7.7	1.1	12.7	0.54
181	2018	ifl	21	938	1260	98.4	97.9	12.8	6.3	0.5	11.2	0.48
182	2019	ifl	30	1324	1098	102.1	97.8	9.2	6.3	4.3	8.8	0.40
183	2020	ifl	14	681	657	104.1	100.2	7.5	4.4	3.9	8.8	-0.04
184	2010	ais0	55	169	181	94.7	94.2	11.1	10.0	0.5	2.5	0.98
185	2011	ais0	47	144	168	91.8	91.8	12.0	11.7	0.0	2.1	0.98

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
186	2012	ais0	47	301	572	94.0	94.4	12.3	12.0	-0.4	2.1	0.99
187	2013	ais0	50	222	441	96.7	97.0	10.8	10.7	-0.3	2.8	0.97
188	2014	ais0	36	388	508	95.1	95.0	12.6	12.5	0.1	3.2	0.97
189	2015	ais0	30	983	1001	102.6	101.7	14.5	14.5	0.9	3.9	0.96
190	2016	ais0	26	673	716	98.9	95.6	13.7	8.2	3.3	10.7	0.63
191	2017	ais0	29	1190	964	100.7	99.3	16.2	7.9	1.3	14.6	0.44
192	2018	ais0	21	889	1195	97.9	97.9	11.8	6.1	0.0	11.4	0.32
193	2019	ais0	30	1317	1086	104.3	99.4	16.7	5.7	4.9	16.7	0.17
194	2020	ais0	14	688	664	99.9	97.9	10.2	3.6	2.1	10.9	-0.03
195	2010	ais1	55	164	178	98.5	98.3	9.5	9.4	0.2	1.4	0.99
196	2011	ais1	47	138	161	97.7	97.6	11.1	10.9	0.1	1.6	0.99
197	2012	ais1	47	288	538	96.3	96.3	11.3	11.2	0.0	1.7	0.99
198	2013	ais1	50	219	422	97.2	97.4	9.0	9.0	-0.2	2.1	0.97
199	2014	ais1	36	379	485	98.8	98.4	13.3	13.0	0.4	2.0	0.99
200	2015	ais1	30	919	919	100.7	100.7	10.9	10.8	0.0	2.8	0.97
201	2016	ais1	26	609	637	97.6	95.5	12.0	7.3	2.1	9.4	0.63
202	2017	ais1	29	965	765	100.9	99.9	12.5	7.3	1.0	10.8	0.51
203	2018	ais1	20	634	849	96.6	97.4	13.6	6.4	-0.8	13.1	0.31
204	2019	ais1	22	423	471	105.6	98.7	10.8	6.7	7.0	10.2	0.39
205	2010	ais2	55	125	139	99.3	99.1	8.8	8.7	0.2	1.2	0.99
206	2011	ais2	47	106	126	99.2	99.1	10.8	10.7	0.1	1.4	0.99
207	2012	ais2	47	221	409	96.8	96.5	10.6	10.5	0.3	1.8	0.99
208	2013	ais2	49	173	324	99.6	99.5	8.7	9.0	0.1	1.9	0.98
209	2014	ais2	36	300	382	99.6	99.3	11.8	12.0	0.3	1.8	0.99
210	2015	ais2	30	700	696	99.6	99.5	12.7	13.1	0.1	2.0	0.99
211	2016	ais2	26	472	493	99.2	95.4	12.0	7.0	3.8	9.2	0.64
212	2017	ais2	29	574	455	101.0	99.6	13.6	8.4	1.4	11.4	0.55
213	2018	ais2	13	220	249	97.5	96.6	12.8	5.8	0.8	12.8	0.23
214	2010	ais3	55	86	99	98.9	99.1	7.9	7.8	-0.1	1.0	0.99
215	2011	ais3	47	73	83	100.1	100.1	9.5	9.1	-0.1	1.4	0.99
216	2012	ais3	47	148	263	97.0	96.9	10.0	9.7	0.1	1.5	0.99
217	2013	ais3	49	117	215	99.5	99.5	7.7	7.8	0.1	1.6	0.98
218	2014	ais3	36	207	269	99.5	99.1	10.6	10.7	0.4	1.7	0.99
219	2015	ais3	30	438	424	99.9	100.1	11.5	11.8	-0.2	1.5	0.99
220	2016	ais3	26	284	287	99.7	96.0	11.0	6.2	3.8	8.7	0.62
221	2017	ais3	22	147	114	99.7	98.7	14.2	8.6	1.0	10.7	0.66
222	2010	ais	55	200	214	98.9	98.8	8.4	8.3	0.1	1.1	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
223	2011	ais	47	171	197	99.1	99.1	10.1	9.9	0.0	1.4	0.99
224	2012	ais	47	350	658	96.7	96.4	10.5	10.4	0.3	1.5	0.99
225	2013	ais	50	262	512	98.5	98.6	8.2	8.4	-0.1	1.9	0.97
226	2014	ais	36	453	584	99.2	98.9	11.5	11.6	0.3	1.6	0.99
227	2015	ais	30	1126	1133	100.1	100.2	11.6	11.7	-0.1	1.8	0.99
228	2016	ais	26	749	791	98.9	95.6	11.3	6.6	3.3	8.6	0.66
229	2017	ais	29	1297	1036	101.0	99.8	13.0	7.8	1.3	10.5	0.59
230	2018	ais	21	941	1265	97.5	97.5	10.9	5.9	0.0	10.8	0.29
231	2019	ais	30	1334	1104	101.6	98.4	9.9	6.1	3.2	10.0	0.30
232	2020	ais	14	688	664	101.2	98.7	6.1	4.5	2.5	7.1	0.11
233	2010	fert	55	174	189	97.3	97.3	9.3	9.2	0.0	1.2	0.99
234	2011	fert	47	147	174	97.3	97.5	11.3	11.3	-0.2	1.4	0.99
235	2012	fert	47	303	566	95.2	95.2	11.6	11.5	0.0	1.8	0.99
236	2013	fert	50	230	444	96.9	97.2	10.1	10.1	-0.3	2.0	0.98
237	2014	fert	36	399	509	98.2	98.3	12.4	12.3	-0.2	1.9	0.99
238	2015	fert	30	966	965	99.0	99.6	12.8	12.7	-0.6	2.3	0.98
239	2016	fert	26	634	662	99.4	96.0	13.6	8.0	3.4	10.6	0.63
240	2017	fert	29	1003	792	100.3	99.2	15.0	8.0	1.1	12.9	0.52
241	2018	fert	20	648	869	98.0	98.0	13.3	6.6	0.0	11.8	0.47
242	2019	fert	22	449	489	104.3	97.3	10.0	7.0	7.0	9.0	0.49
243	2010	interval	55	174	189	98.7	98.8	8.7	8.6	-0.2	1.1	0.99
244	2011	interval	47	147	174	98.4	98.6	11.3	11.3	-0.1	1.3	0.99
245	2012	interval	47	303	566	95.8	95.7	11.4	11.3	0.0	1.6	0.99
246	2013	interval	50	230	444	97.3	97.5	10.8	10.8	-0.2	1.6	0.99
247	2014	interval	36	399	509	98.4	98.6	12.5	12.5	-0.2	1.7	0.99
248	2015	interval	30	966	965	98.2	99.0	11.3	11.4	-0.8	2.0	0.98
249	2016	interval	26	634	662	101.0	97.2	13.0	7.9	3.8	10.5	0.59
250	2017	interval	29	1003	792	99.6	98.7	13.8	7.2	0.9	12.2	0.47
251	2018	interval	20	648	869	98.7	98.6	12.6	6.9	0.1	10.4	0.56
252	2019	interval	22	449	489	102.4	96.5	8.1	6.0	5.9	6.9	0.55

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

Obs	diff	d_cr0	d_cr	d_nrr0	d_nrr	d_icf	d_ifl0	d_ifl	d_ais0	d_ais	d_fert	d_interval
1	-34	1	.	.	.	.	.	.	.	.	.	.
2	-33	.	.	.	.	.	.	.	1	.	.	.
3	-32	.	.	.	.	.	1	.	.	.	.	.
4	-30	.	.	.	.	.	.	.	1	.	.	.
5	-29	.	.	1	.	.	1	.	.	.	.	.
6	-26	1	.	1	.	.	1	.	1	.	.	.
7	-25	.	.	.	.	.	.	1	1	.	.	.
8	-24	.	.	.	.	.	.	.	.	.	1	.
9	-23	.	.	.	.	.	.	.	1	.	.	.
10	-22	1	.	.	.	.	1	1	1	.	.	.
11	-21	.	.	1	.	.	1	.	1	.	.	.
12	-20	1	.	2	.	.	1	1	.	3	.	1
13	-19	1	.	1	.	.	.	1	1	.	3	.
14	-18	5	1	3	.	1	2	2	2	.	.	.
15	-17	1	1	.	1	.	.	1	.	1	1	3
16	-16	1	2	2	1	1	1	.	.	1	1	1
17	-15	2	2	1	2	.	.	2	1	1	1	2
18	-14	.	2	3	1	.	4	1	1	1	1	.
19	-13	1	2	1	.	2	1	3	3	2	2	4
20	-12	.	1	2	1	1	2	1	2	5	4	1
21	-11	.	.	2	1	.	5	2	3	2	1	2
22	-10	2	4	1	1	4	4	4	2	2	1	2
23	-9	1	2	3	4	1	1	.	3	.	.	3
24	-8	2	1	3	3	8	1	2	4	2	2	.
25	-7	4	2	6	4	4	3	2	5	1	3	1
26	-6	1	.	3	2	1	4	2	1	4	1	3
27	-5	4	2	9	6	3	4	4	3	3	3	1
28	-4	3	5	6	5	3	4	7	3	5	3	3
29	-3	6	5	4	5	5	6	6	5	4	7	5
30	-2	5	12	7	12	4	8	5	6	10	10	10
31	-1	12	8	4	6	14	5	11	9	13	10	15
32	0	5	11	3	15	11	7	13	3	7	6	5
33	1	4	14	11	11	10	7	11	8	13	8	8
34	2	7	5	3	12	5	4	4	9	8	5	3
35	3	6	7	8	7	6	8	2	2	2	6	5
36	4	5	3	5	6	3	9	5	5	6	1	2

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

Obs	diff	d_cr0	d_cr	d_nrr0	d_nrr	d_icf	d_ifl0	d_ifl	d_ais0	d_ais	d_fert	d_interval
37	5	4	2	3	5	6	6	4	4	7	2	3
38	6	8	6	8	7	3	3	6	3	1	9	8
39	7	6	5	9	7	5	5	5	12	9	2	4
40	8	4	.	1	2	3	2	5	1	3	2	2
41	9	2	5	3	7	3	2	2	6	11	3	3
42	10	2	4	5	7	7	5	2	5	3	2	2
43	11	3	1	2	1	2	1	5	1	2	3	4
44	12	3	2	2	.	4	4	5	2	5	2	1
45	13	2	3	.	3	2	6	3	5	2	2	3
46	14	.	1	3	2	.	2	5	4	.	2	4
47	15	5	2	2	1	3	.	1	1	3	4	4
48	16	4	6	1	.	.	2	3	.	1	2	2
49	17	1	.	2	1	.	3	.	1	2	.	2
50	18	4	2	2	.	.	1	1	2	.	3	1
51	19	.	5	2	.	1	2	5	1	2	.	1
52	20	3	1	.	.	.	1	1	2	1	.	.
53	21	1	.	2	1	1	.	.	4	.	4	.
54	22	2	3	.	.	.	1	1	1	.	.	1
55	23	.	1	3	.	.	.	.	2	.	1	1
56	24	.	.	.	.	.	1	1	.	1	2	.
57	25	1	.	.	.	.	3	.	1	.	.	1
58	26	.	2	2	.	.	2	1	.	.	1	.
59	27	.	1	.	.	.	1	.	.	1	.	.
60	28	2	.	1	.	.	.	.	1	.	.	.
61	29	1	.	1	.	.	.	.	.	.	.	.
62	30	2	.	.	.	.	1	.	1	.	.	.
63	31	.	1	.	.	.	.	.	.	.	.	.
64	32	1	.	.	.	.	.	.	.	.	.	.
65	33	2	.	.	.	.	.	.	2	.	.	.
66	34	.	1	.	.	.	.	.	.	.	.	.
67	35	1	1	.	.	.	.	.	.	.	.	.
68	38	.	1	.	.	.	.	.	.	.	.	.
69	39	1	.	.	.	.	.	.	.	.	.	.
70	41	1	.	.	.	.	.	.	.	.	.	.

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

Obs	diff	p_cr0	p_cr	p_nrr0	p_nrr	p_icf	p_ifl0	p_ifl	p_ais0	p_ais	p_fert	p_interval
1	-34	1	.	.	.	.	.	.	.	.	.	.
2	-33	.	.	.	.	.	.	.	1	.	.	.
3	-32	.	.	.	.	.	1	.	.	.	.	.
4	-30	.	.	.	.	.	.	.	1	.	.	.
5	-29	.	.	1	.	.	1	.	.	.	.	.
6	-26	1	.	1	.	.	1	.	1	.	.	.
7	-25	.	.	.	.	.	.	1	1	.	.	.
8	-24	.	.	.	.	.	.	.	.	.	1	.
9	-23	.	.	.	.	.	.	.	1	.	.	.
10	-22	1	.	.	.	.	1	1	1	.	.	.
11	-21	.	.	1	.	.	1	.	1	.	.	.
12	-20	1	.	1	.	.	1	1	.	2	.	1
13	-19	1	.	1	.	.	.	1	1	.	2	.
14	-18	3	1	2	.	1	1	1	1	.	.	.
15	-17	1	1	.	1	.	.	1	.	1	1	2
16	-16	1	1	1	1	1	1	.	.	1	1	1
17	-15	1	1	1	1	.	.	1	1	1	1	2
18	-14	.	1	2	1	.	3	1	1	1	1	.
19	-13	1	1	1	.	2	1	2	2	1	2	3
20	-12	.	1	1	1	1	1	1	1	3	3	1
21	-11	.	.	1	1	.	3	1	2	1	1	2
22	-10	1	3	1	1	3	3	3	1	1	1	2
23	-9	1	1	2	3	1	1	.	2	.	.	2
24	-8	1	1	2	2	6	1	1	3	1	2	.
25	-7	3	1	4	3	3	2	1	3	1	2	1
26	-6	1	.	2	1	1	3	1	1	3	1	2
27	-5	3	1	6	4	2	3	3	2	2	2	1
28	-4	2	3	4	3	2	3	5	2	3	2	2
29	-3	4	3	3	3	4	4	4	3	3	6	4
30	-2	3	8	5	8	3	5	3	4	7	8	8
31	-1	8	5	3	4	11	3	7	6	9	8	12
32	0	3	7	2	10	9	5	9	2	5	5	4
33	1	3	9	7	7	8	5	7	5	9	6	6
34	2	5	3	2	8	4	3	3	6	5	4	2
35	3	4	5	5	5	5	5	1	1	1	5	4
36	4	3	2	3	4	2	6	3	3	4	1	2

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

Obs	diff	p_cr0	p_cr	p_nrr0	p_nrr	p_icf	p_ifl0	p_ifl	p_ais0	p_ais	p_fert	p_interval
37	5	3	1	2	3	5	4	3	3	5	2	2
38	6	5	4	5	5	2	2	4	2	1	7	6
39	7	4	3	6	5	4	3	3	8	6	2	3
40	8	3	.	1	1	2	1	3	1	2	2	2
41	9	1	3	2	5	2	1	1	4	7	2	2
42	10	1	3	3	5	6	3	1	3	2	2	2
43	11	2	1	1	1	2	1	3	1	1	2	3
44	12	2	1	1	.	3	3	3	1	3	2	1
45	13	1	2	.	2	2	4	2	3	1	2	2
46	14	.	1	2	1	.	1	3	3	.	2	3
47	15	3	1	1	1	2	.	1	1	2	3	3
48	16	3	4	1	.	.	1	2	.	1	2	2
49	17	1	.	1	1	.	2	.	1	1	.	2
50	18	3	1	1	.	.	1	1	1	.	2	1
51	19	.	3	1	.	1	1	3	1	1	.	1
52	20	2	1	.	.	.	1	1	1	1	.	.
53	21	1	.	1	1	1	.	.	3	.	3	.
54	22	1	2	.	.	.	1	1	1	.	.	1
55	23	.	1	2	.	.	.	.	1	.	1	1
56	24	.	.	.	.	.	1	1	.	1	2	.
57	25	1	.	.	.	.	2	.	1	.	.	1
58	26	.	1	1	.	.	1	1	.	.	1	.
59	27	.	1	.	.	.	1	.	.	1	.	.
60	28	1	.	1	.	.	.	.	1	.	.	.
61	29	1	.	1	.	.	.	.	.	.	.	.
62	30	1	.	.	.	.	1	.	1	.	.	.
63	31	.	1	.	.	.	.	.	.	.	.	.
64	32	1	.	.	.	.	.	.	.	.	.	.
65	33	1	.	.	.	.	.	.	1	.	.	.
66	34	.	1	.	.	.	.	.	.	.	.	.
67	35	1	1	.	.	.	.	.	.	.	.	.
68	38	.	1	.	.	.	.	.	.	.	.	.
69	39	1	.	.	.	.	.	.	.	.	.	.
70	41	1	.	.	.	.	.	.	.	.	.	.

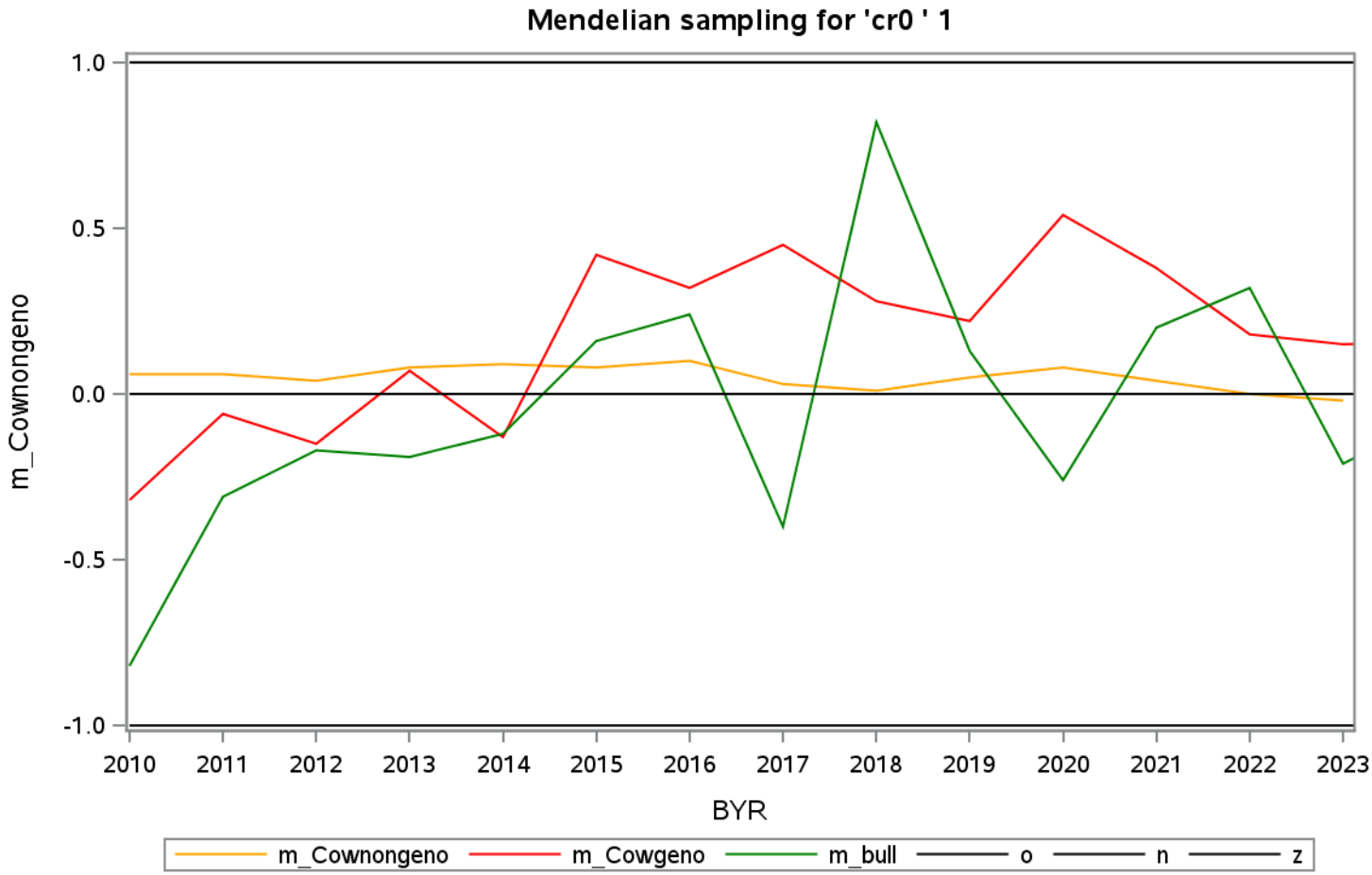
JER Legarra Reverter regression for SS for bulls, born after 2015 and with minimum 15 offspring in full and no offspring in reduc

Obs	status	t	name	no	b1	rsq
1	1&2	1	cr0	130	1.10	0.52
2	1&2	2	cr1	99	0.99	0.48
3	1&2	3	cr2	66	0.87	0.48
4	1&2	4	cr3	42	0.94	0.53
5	1&2	5	cr	130	0.99	0.56
6	1&2	6	nrr0	136	0.85	0.37
7	1&2	7	nrr1	103	0.88	0.50
8	1&2	8	nrr2	71	0.97	0.59
9	1&2	9	nrr3	47	1.08	0.66
10	1&2	10	nrr	136	0.98	0.65
11	1&2	11	icf1	102	0.90	0.54
12	1&2	12	icf2	71	0.99	0.59
13	1&2	13	icf3	47	1.00	0.62
14	1&2	14	icf	102	0.92	0.58
15	1&2	15	ifl0	136	0.95	0.41
16	1&2	16	ifl1	103	0.97	0.56
17	1&2	17	ifl2	71	1.02	0.58
18	1&2	18	ifl3	49	1.08	0.61
19	1&2	19	ifl	136	1.03	0.63
20	1&2	20	ais0	136	0.90	0.45
21	1&2	21	ais1	102	0.97	0.59
22	1&2	22	ais2	70	0.90	0.54
23	1&2	23	ais3	46	0.96	0.55
24	1&2	24	ais	136	0.96	0.62
25	1&2	34	fert	102	1.00	0.62
26	1&2	35	inte	102	1.02	0.63

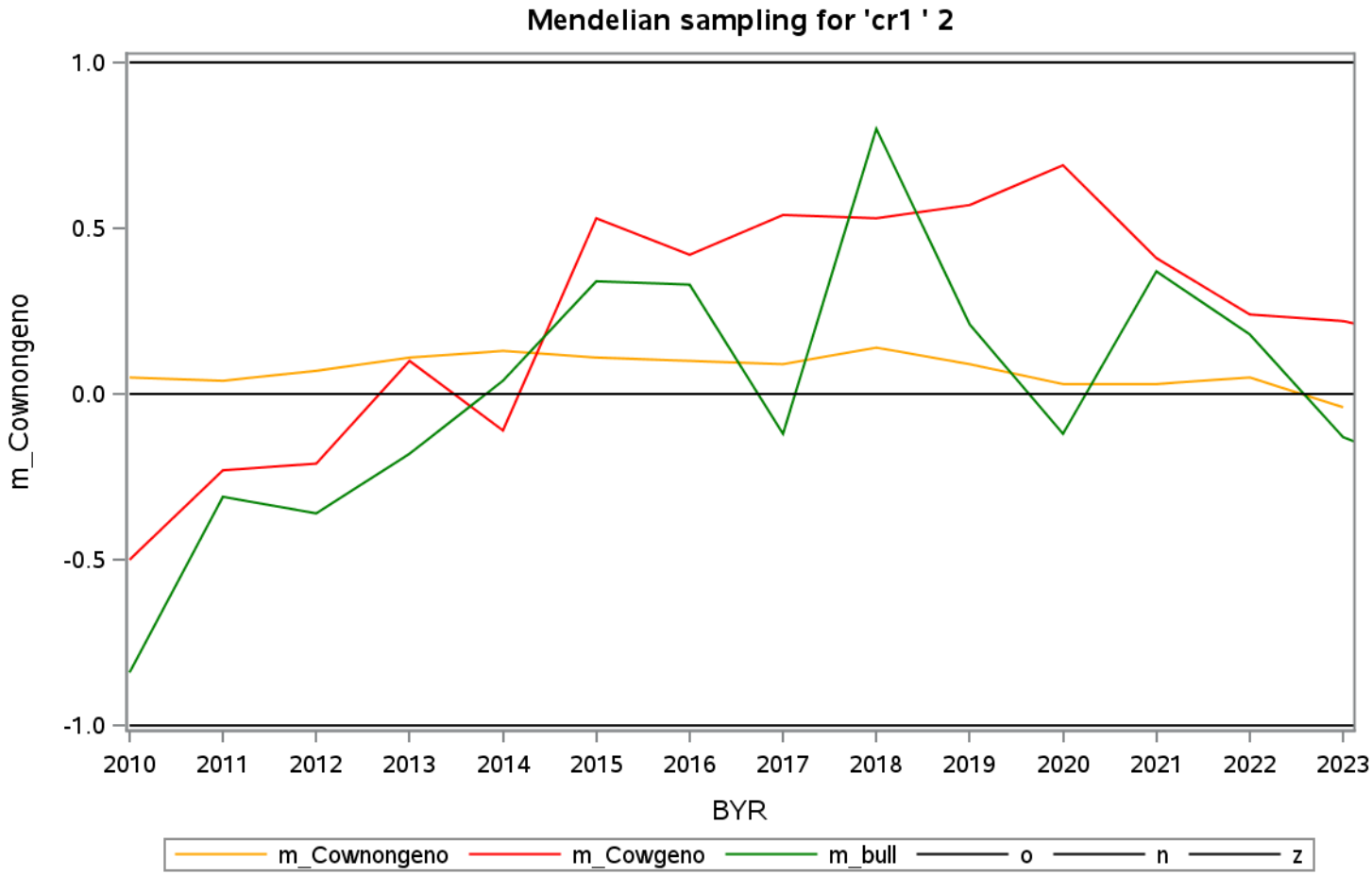
JER Legarra Reverter regression for EBV for bulls, born after 2015 and with minimum 15 offspring in full and no offspring in reduc

Obs	status	t	name	no	b1	rsq
1	1&2	1	cr0	130	0.94	0.24
2	1&2	2	cr1	99	0.79	0.18
3	1&2	3	cr2	66	0.86	0.27
4	1&2	4	cr3	42	0.94	0.34
5	1&2	5	cr	130	0.75	0.18
6	1&2	6	nrr0	136	0.74	0.15
7	1&2	7	nrr1	103	0.93	0.30
8	1&2	8	nrr2	71	0.97	0.40
9	1&2	9	nrr3	47	1.07	0.53
10	1&2	10	nrr	136	0.92	0.40
11	1&2	11	icf1	102	0.91	0.27
12	1&2	12	icf2	71	0.89	0.27
13	1&2	13	icf3	47	0.87	0.33
14	1&2	14	icf	102	0.82	0.26
15	1&2	15	ifl0	136	0.86	0.21
16	1&2	16	ifl1	103	0.87	0.22
17	1&2	17	ifl2	71	0.97	0.26
18	1&2	18	ifl3	49	0.95	0.32
19	1&2	19	ifl	136	0.81	0.21
20	1&2	20	ais0	136	0.75	0.14
21	1&2	21	ais1	102	0.84	0.22
22	1&2	22	ais2	70	0.84	0.26
23	1&2	23	ais3	46	0.99	0.38
24	1&2	24	ais	136	0.73	0.21
25	1&2	34	fert	102	0.85	0.23
26	1&2	35	inte	102	0.86	0.24

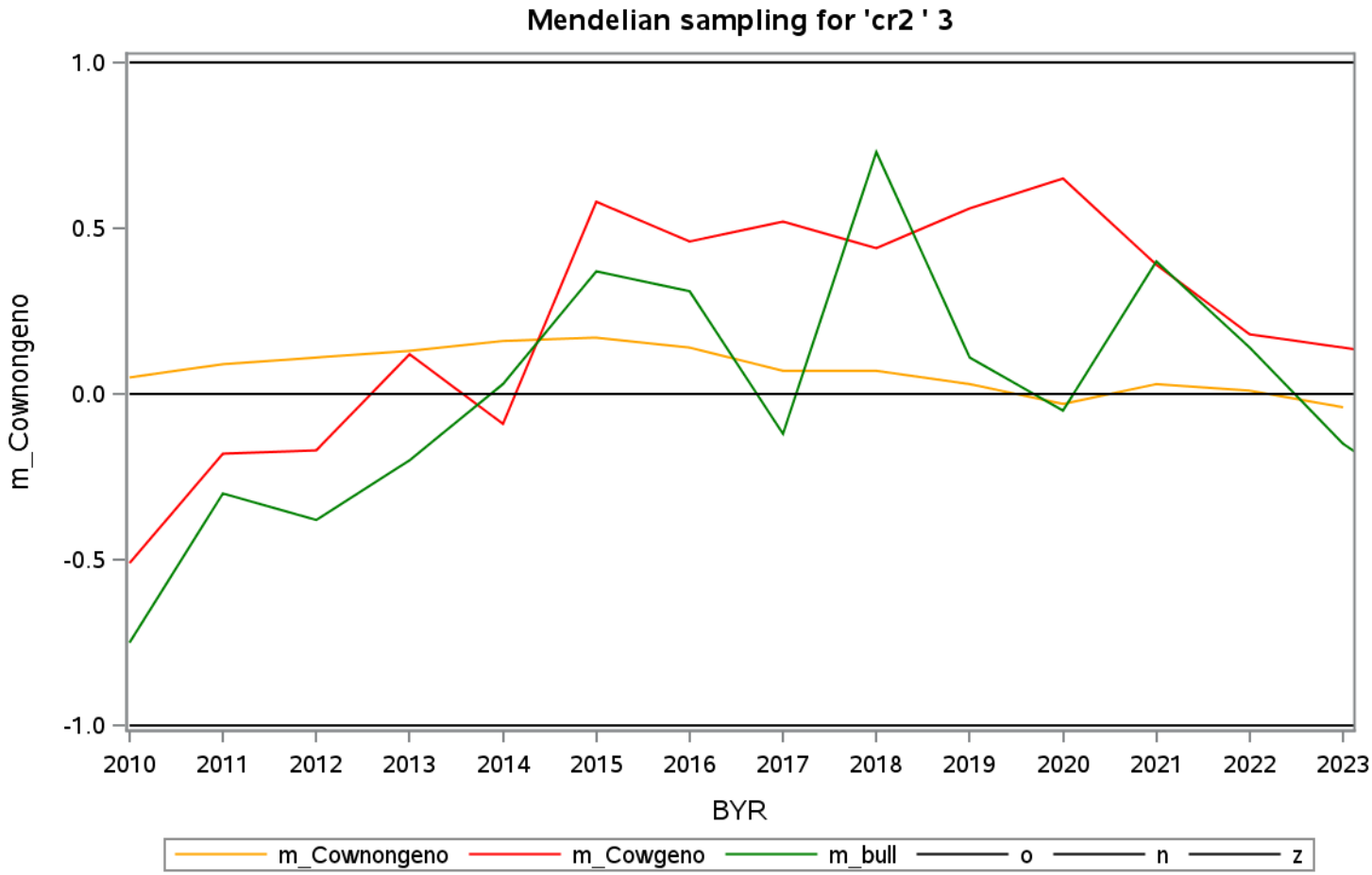
Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	0.06	-0.32	-0.82	22340	2211	243
2	2011	0.06	-0.06	-0.31	21767	4100	386
3	2012	0.04	-0.15	-0.17	21791	4778	410
4	2013	0.08	0.07	-0.19	19721	3812	415
5	2014	0.09	-0.13	-0.12	20259	4781	451
6	2015	0.08	0.42	0.16	19264	5739	535
7	2016	0.10	0.32	0.24	17576	6787	470
8	2017	0.03	0.45	-0.40	16355	8436	546
9	2018	0.01	0.28	0.82	17235	10435	358
10	2019	0.05	0.22	0.13	16682	12721	464
11	2020	0.08	0.54	-0.26	18327	15146	470
12	2021	0.04	0.38	0.20	21708	15086	412
13	2022	0.00	0.18	0.32	17769	15695	463
14	2023	-0.02	0.15	-0.21	156	13972	562
15	2024	.	0.16	-0.07	.	2713	141



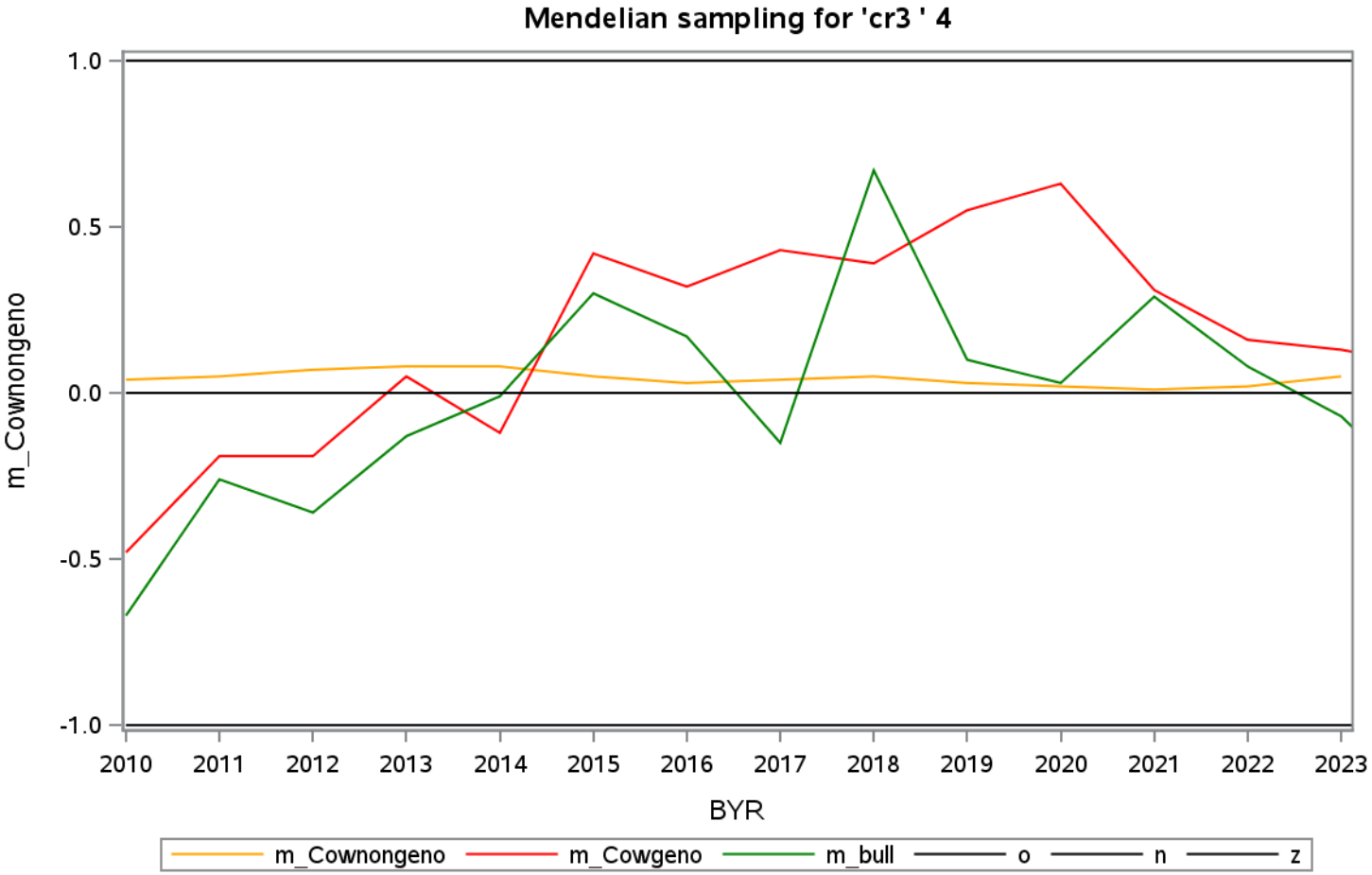
Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	0.05	-0.50	-0.84	22340	2211	243
2	2011	0.04	-0.23	-0.31	21767	4100	386
3	2012	0.07	-0.21	-0.36	21791	4778	410
4	2013	0.11	0.10	-0.18	19721	3812	415
5	2014	0.13	-0.11	0.04	20259	4781	451
6	2015	0.11	0.53	0.34	19264	5739	535
7	2016	0.10	0.42	0.33	17576	6787	470
8	2017	0.09	0.54	-0.12	16355	8436	546
9	2018	0.14	0.53	0.80	17235	10435	358
10	2019	0.09	0.57	0.21	16682	12721	464
11	2020	0.03	0.69	-0.12	18327	15146	470
12	2021	0.03	0.41	0.37	21708	15086	412
13	2022	0.05	0.24	0.18	17769	15695	463
14	2023	-0.04	0.22	-0.13	156	13972	562
15	2024	.	0.16	-0.24	.	2713	141



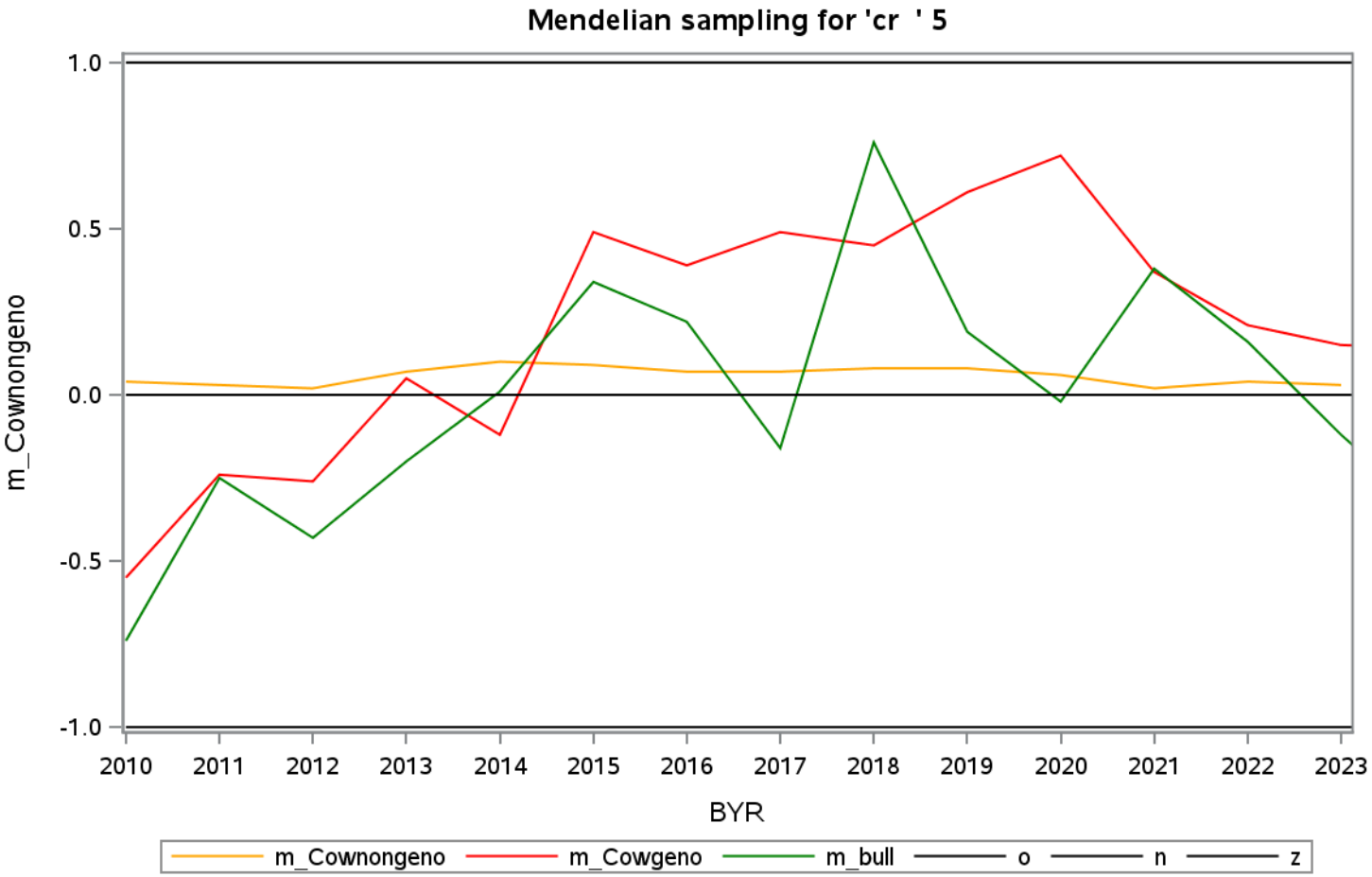
Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	0.05	-0.51	-0.75	22340	2211	243
2	2011	0.09	-0.18	-0.30	21767	4100	386
3	2012	0.11	-0.17	-0.38	21791	4778	410
4	2013	0.13	0.12	-0.20	19721	3812	415
5	2014	0.16	-0.09	0.03	20259	4781	451
6	2015	0.17	0.58	0.37	19264	5739	535
7	2016	0.14	0.46	0.31	17576	6787	470
8	2017	0.07	0.52	-0.12	16355	8436	546
9	2018	0.07	0.44	0.73	17235	10435	358
10	2019	0.03	0.56	0.11	16682	12721	464
11	2020	-0.03	0.65	-0.05	18327	15146	470
12	2021	0.03	0.39	0.40	21708	15086	412
13	2022	0.01	0.18	0.14	17769	15695	463
14	2023	-0.04	0.14	-0.15	156	13972	562
15	2024	.	0.10	-0.34	.	2713	141



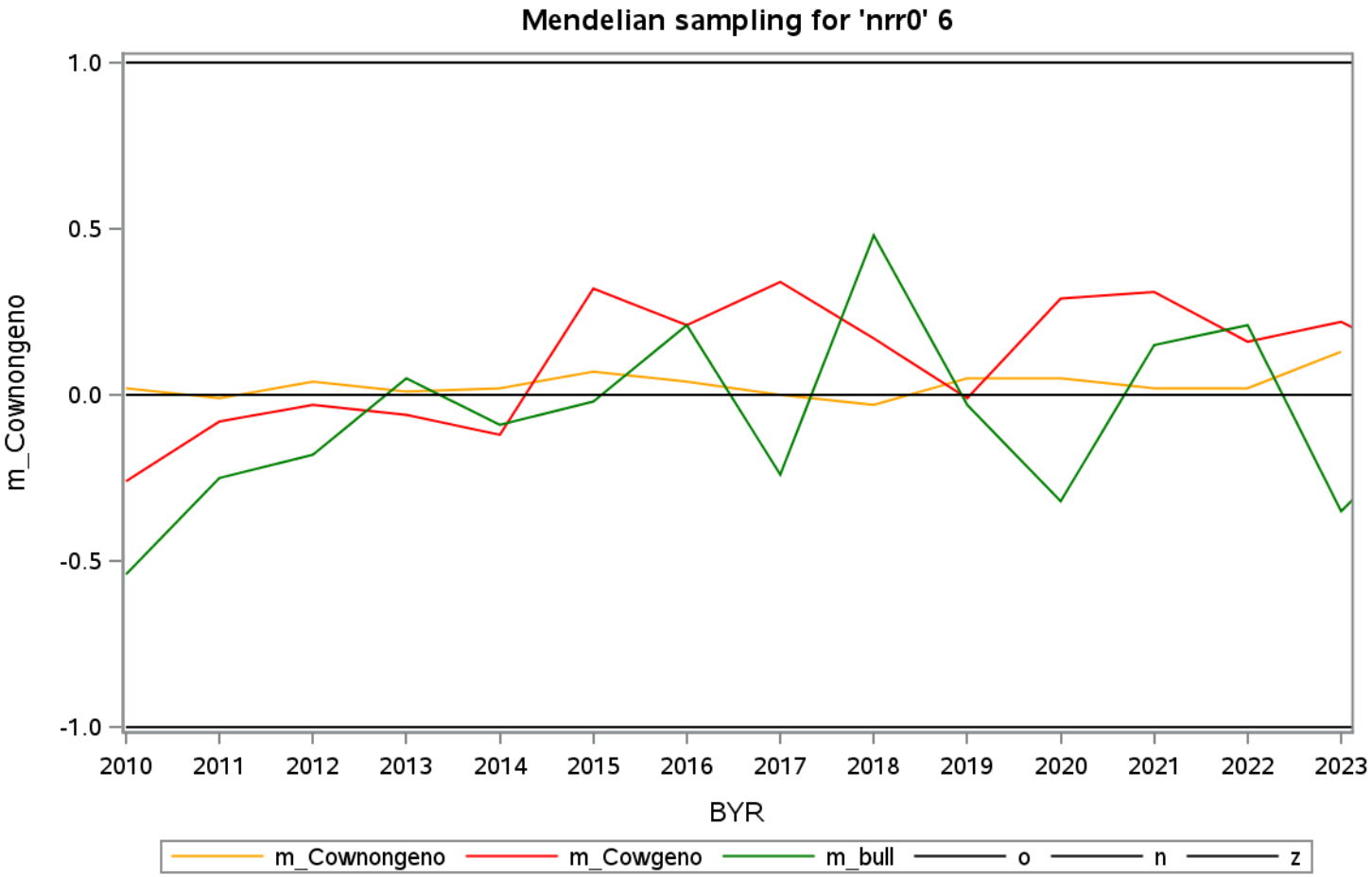
Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	0.04	-0.48	-0.67	22340	2211	243
2	2011	0.05	-0.19	-0.26	21767	4100	386
3	2012	0.07	-0.19	-0.36	21791	4778	410
4	2013	0.08	0.05	-0.13	19721	3812	415
5	2014	0.08	-0.12	-0.01	20259	4781	451
6	2015	0.05	0.42	0.30	19264	5739	535
7	2016	0.03	0.32	0.17	17576	6787	470
8	2017	0.04	0.43	-0.15	16355	8436	546
9	2018	0.05	0.39	0.67	17235	10435	358
10	2019	0.03	0.55	0.10	16682	12721	464
11	2020	0.02	0.63	0.03	18327	15146	470
12	2021	0.01	0.31	0.29	21708	15086	412
13	2022	0.02	0.16	0.08	17769	15695	463
14	2023	0.05	0.13	-0.07	156	13972	562
15	2024	.	0.08	-0.34	.	2713	141



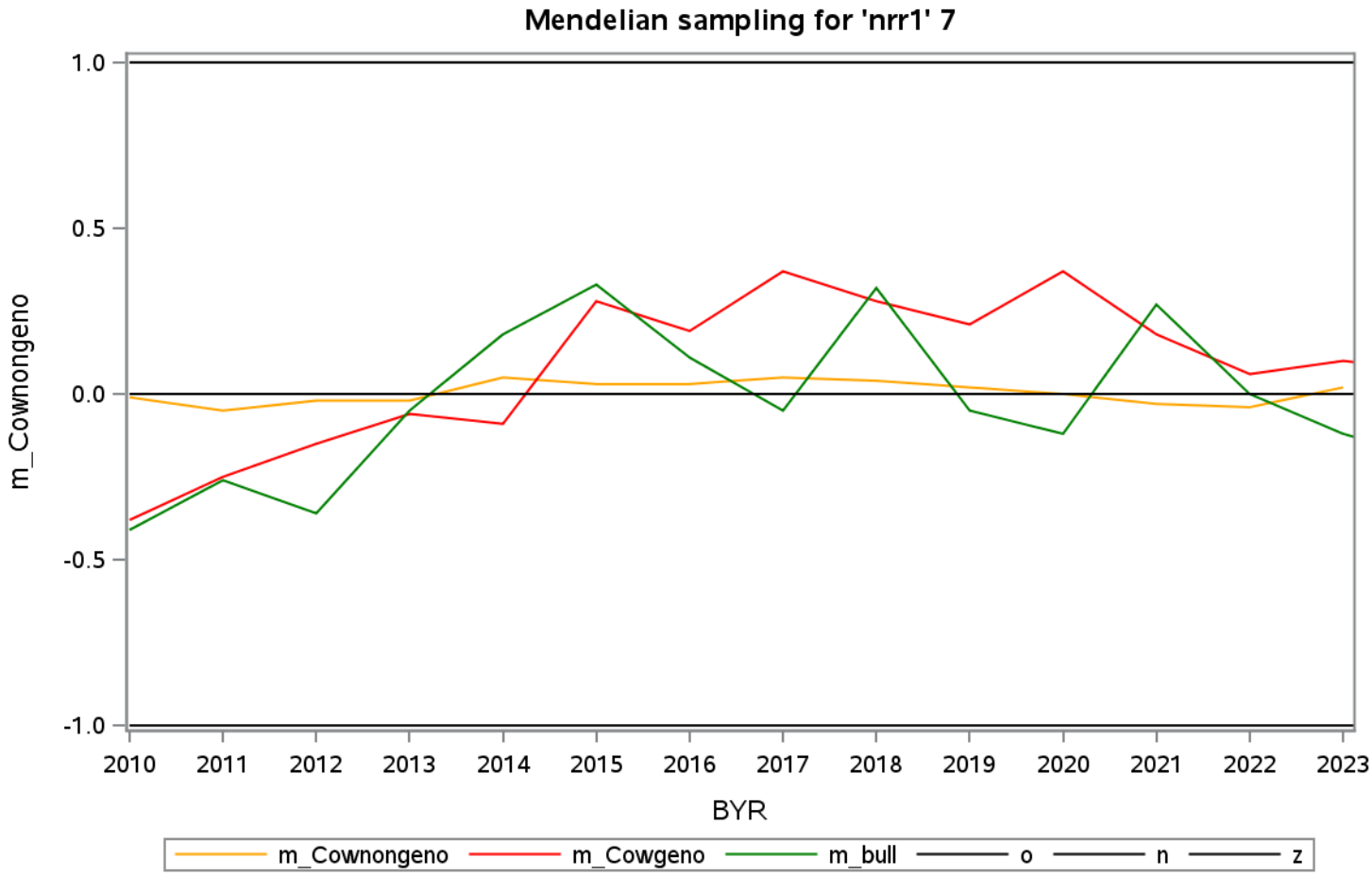
Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	0.04	-0.55	-0.74	22340	2211	243
2	2011	0.03	-0.24	-0.25	21767	4100	386
3	2012	0.02	-0.26	-0.43	21791	4778	410
4	2013	0.07	0.05	-0.20	19721	3812	415
5	2014	0.10	-0.12	0.01	20259	4781	451
6	2015	0.09	0.49	0.34	19264	5739	535
7	2016	0.07	0.39	0.22	17576	6787	470
8	2017	0.07	0.49	-0.16	16355	8436	546
9	2018	0.08	0.45	0.76	17235	10435	358
10	2019	0.08	0.61	0.19	16682	12721	464
11	2020	0.06	0.72	-0.02	18327	15146	470
12	2021	0.02	0.37	0.38	21708	15086	412
13	2022	0.04	0.21	0.16	17769	15695	463
14	2023	0.03	0.15	-0.12	156	13972	562
15	2024	.	0.14	-0.37	.	2713	141



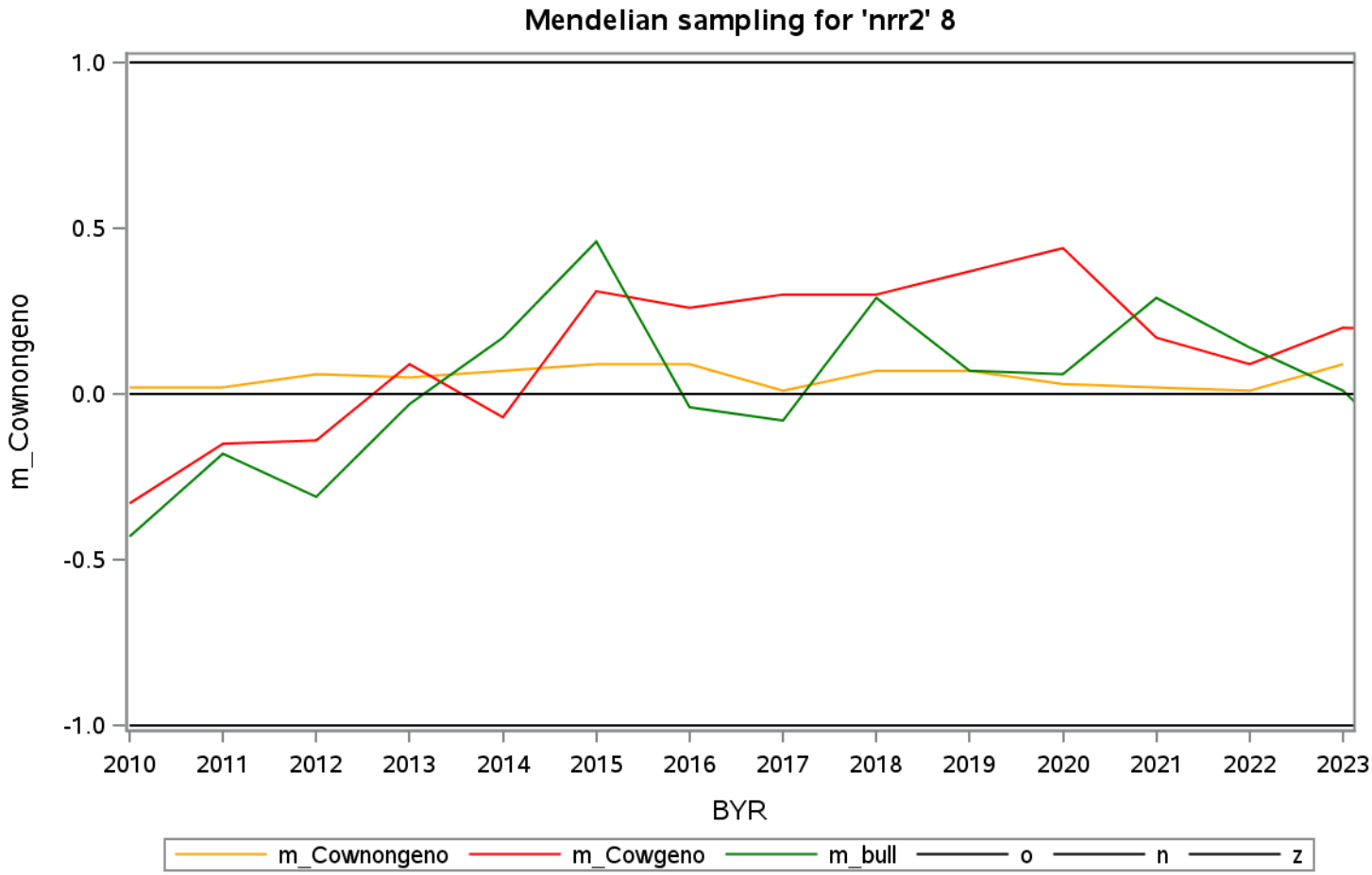
Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	0.02	-0.26	-0.54	22340	2211	243
2	2011	-0.01	-0.08	-0.25	21767	4100	386
3	2012	0.04	-0.03	-0.18	21791	4778	410
4	2013	0.01	-0.06	0.05	19721	3812	415
5	2014	0.02	-0.12	-0.09	20259	4781	451
6	2015	0.07	0.32	-0.02	19264	5739	535
7	2016	0.04	0.21	0.21	17576	6787	470
8	2017	0.00	0.34	-0.24	16355	8436	546
9	2018	-0.03	0.17	0.48	17235	10435	358
10	2019	0.05	-0.01	-0.03	16682	12721	464
11	2020	0.05	0.29	-0.32	18327	15146	470
12	2021	0.02	0.31	0.15	21708	15086	412
13	2022	0.02	0.16	0.21	17769	15695	463
14	2023	0.13	0.22	-0.35	156	13972	562
15	2024	.	0.08	-0.07	.	2713	141



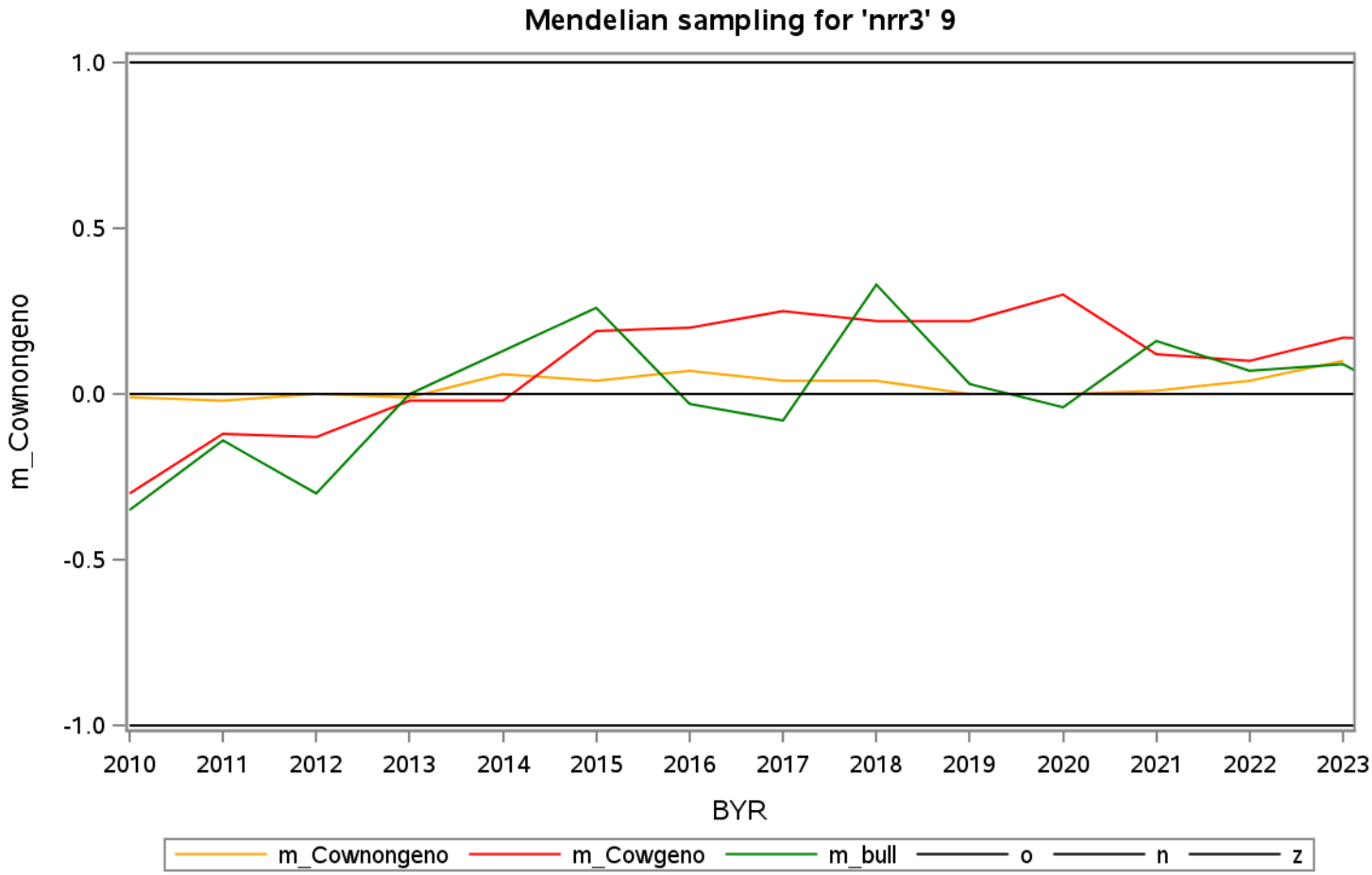
Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	-0.01	-0.38	-0.41	22340	2211	243
2	2011	-0.05	-0.25	-0.26	21767	4100	386
3	2012	-0.02	-0.15	-0.36	21791	4778	410
4	2013	-0.02	-0.06	-0.05	19721	3812	415
5	2014	0.05	-0.09	0.18	20259	4781	451
6	2015	0.03	0.28	0.33	19264	5739	535
7	2016	0.03	0.19	0.11	17576	6787	470
8	2017	0.05	0.37	-0.05	16355	8436	546
9	2018	0.04	0.28	0.32	17235	10435	358
10	2019	0.02	0.21	-0.05	16682	12721	464
11	2020	0.00	0.37	-0.12	18327	15146	470
12	2021	-0.03	0.18	0.27	21708	15086	412
13	2022	-0.04	0.06	0.00	17769	15695	463
14	2023	0.02	0.10	-0.12	156	13972	562
15	2024	.	0.07	-0.20	.	2713	141



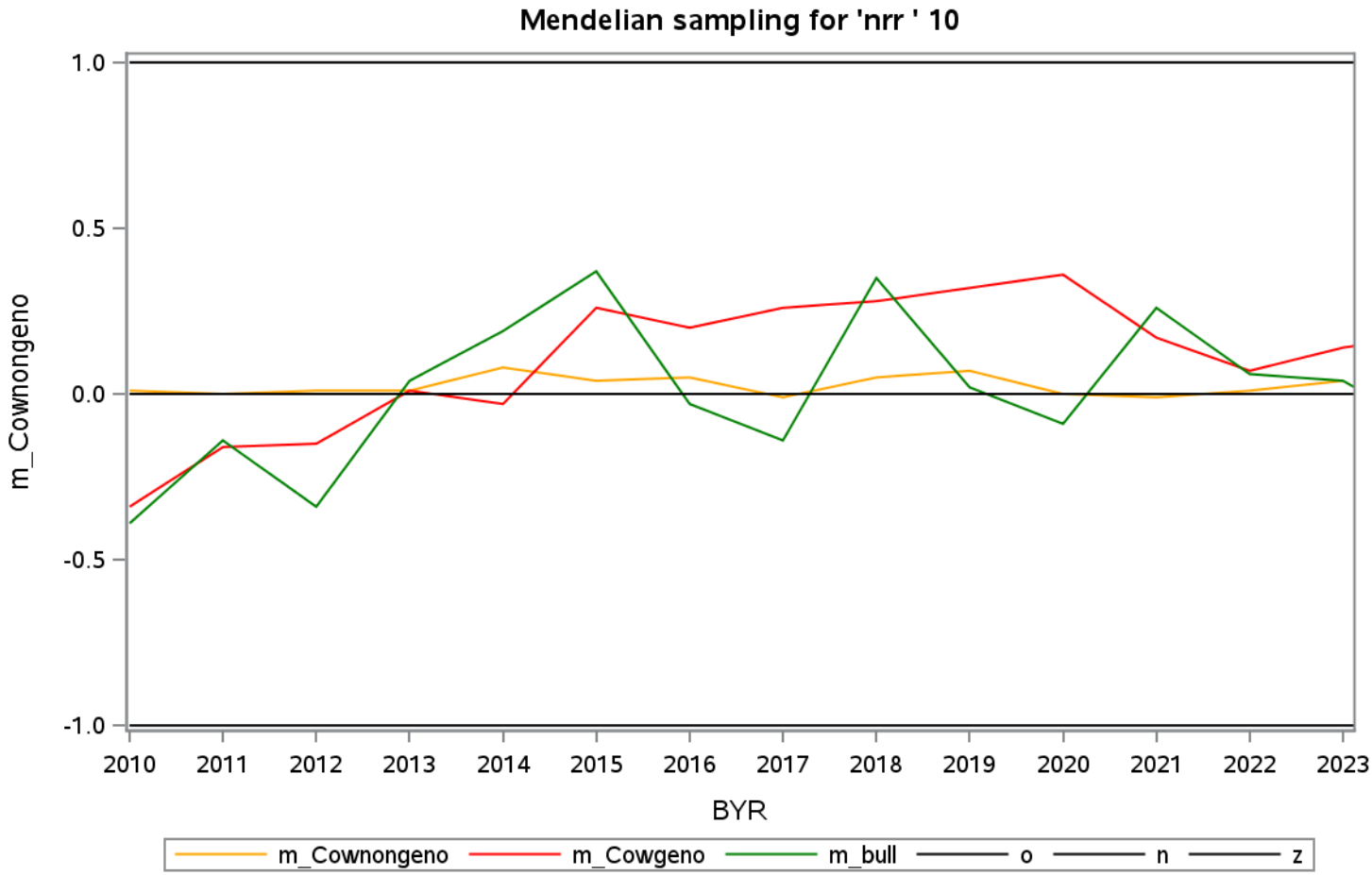
Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	0.02	-0.33	-0.43	22340	2211	243
2	2011	0.02	-0.15	-0.18	21767	4100	386
3	2012	0.06	-0.14	-0.31	21791	4778	410
4	2013	0.05	0.09	-0.03	19721	3812	415
5	2014	0.07	-0.07	0.17	20259	4781	451
6	2015	0.09	0.31	0.46	19264	5739	535
7	2016	0.09	0.26	-0.04	17576	6787	470
8	2017	0.01	0.30	-0.08	16355	8436	546
9	2018	0.07	0.30	0.29	17235	10435	358
10	2019	0.07	0.37	0.07	16682	12721	464
11	2020	0.03	0.44	0.06	18327	15146	470
12	2021	0.02	0.17	0.29	21708	15086	412
13	2022	0.01	0.09	0.14	17769	15695	463
14	2023	0.09	0.20	0.01	156	13972	562
15	2024	.	0.19	-0.26	.	2713	141



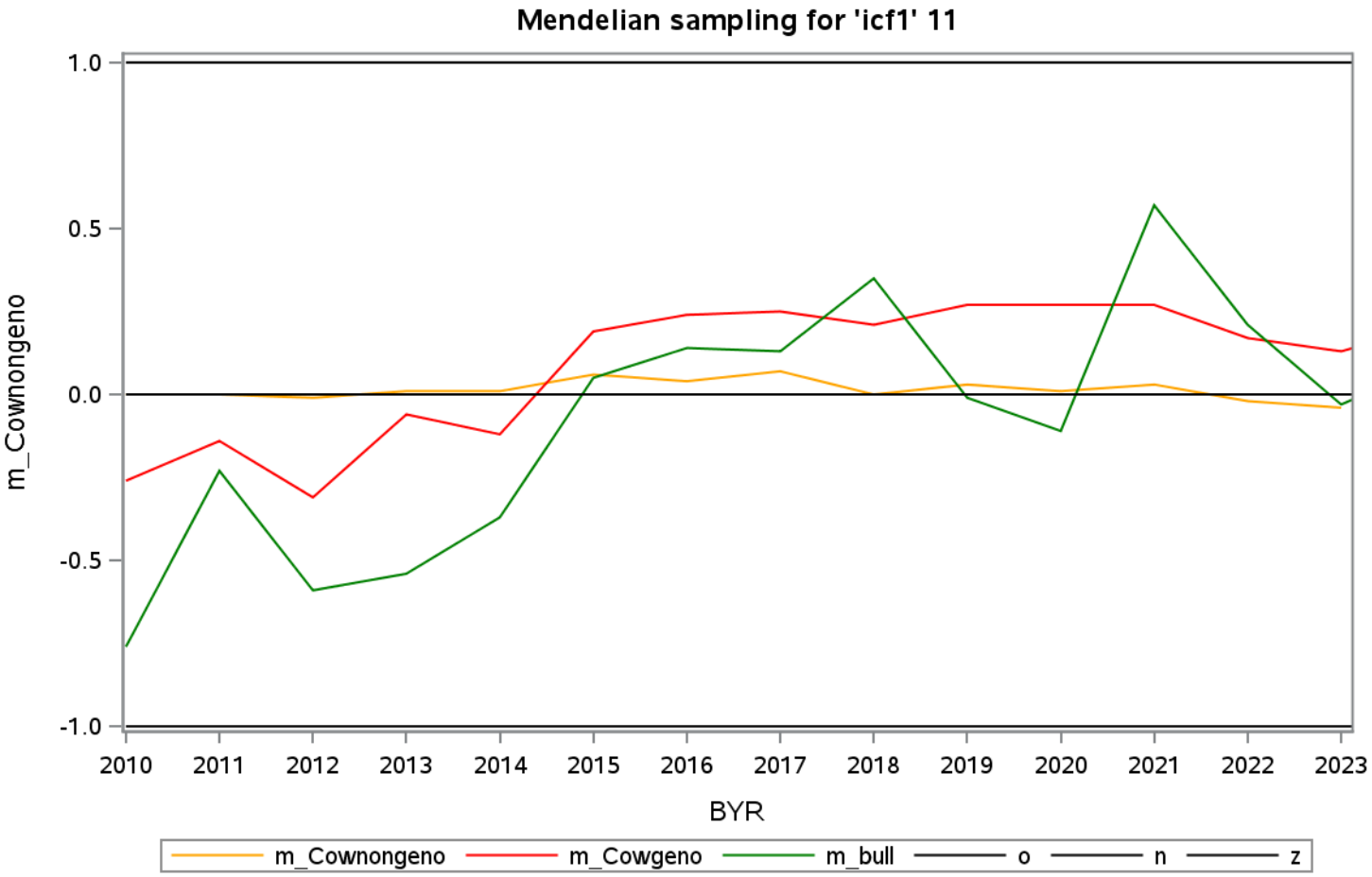
Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	-0.01	-0.30	-0.35	22340	2211	243
2	2011	-0.02	-0.12	-0.14	21767	4100	386
3	2012	0.00	-0.13	-0.30	21791	4778	410
4	2013	-0.01	-0.02	0.00	19721	3812	415
5	2014	0.06	-0.02	0.13	20259	4781	451
6	2015	0.04	0.19	0.26	19264	5739	535
7	2016	0.07	0.20	-0.03	17576	6787	470
8	2017	0.04	0.25	-0.08	16355	8436	546
9	2018	0.04	0.22	0.33	17235	10435	358
10	2019	0.00	0.22	0.03	16682	12721	464
11	2020	0.00	0.30	-0.04	18327	15146	470
12	2021	0.01	0.12	0.16	21708	15086	412
13	2022	0.04	0.10	0.07	17769	15695	463
14	2023	0.10	0.17	0.09	156	13972	562
15	2024	.	0.16	-0.06	.	2713	141



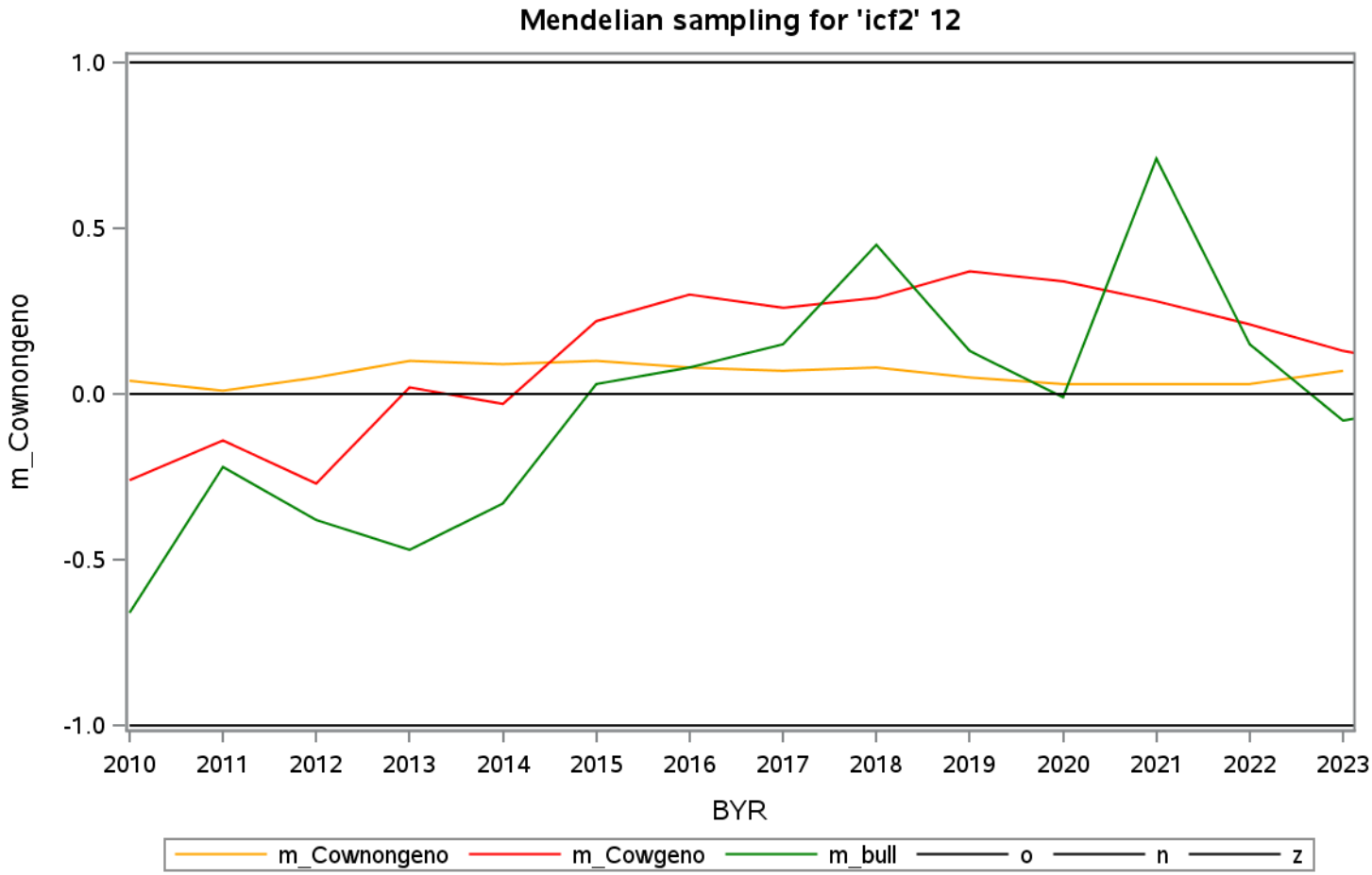
Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	0.01	-0.34	-0.39	22340	2211	243
2	2011	0.00	-0.16	-0.14	21767	4100	386
3	2012	0.01	-0.15	-0.34	21791	4778	410
4	2013	0.01	0.01	0.04	19721	3812	415
5	2014	0.08	-0.03	0.19	20259	4781	451
6	2015	0.04	0.26	0.37	19264	5739	535
7	2016	0.05	0.20	-0.03	17576	6787	470
8	2017	-0.01	0.26	-0.14	16355	8436	546
9	2018	0.05	0.28	0.35	17235	10435	358
10	2019	0.07	0.32	0.02	16682	12721	464
11	2020	0.00	0.36	-0.09	18327	15146	470
12	2021	-0.01	0.17	0.26	21708	15086	412
13	2022	0.01	0.07	0.06	17769	15695	463
14	2023	0.04	0.14	0.04	156	13972	562
15	2024	.	0.18	-0.12	.	2713	141



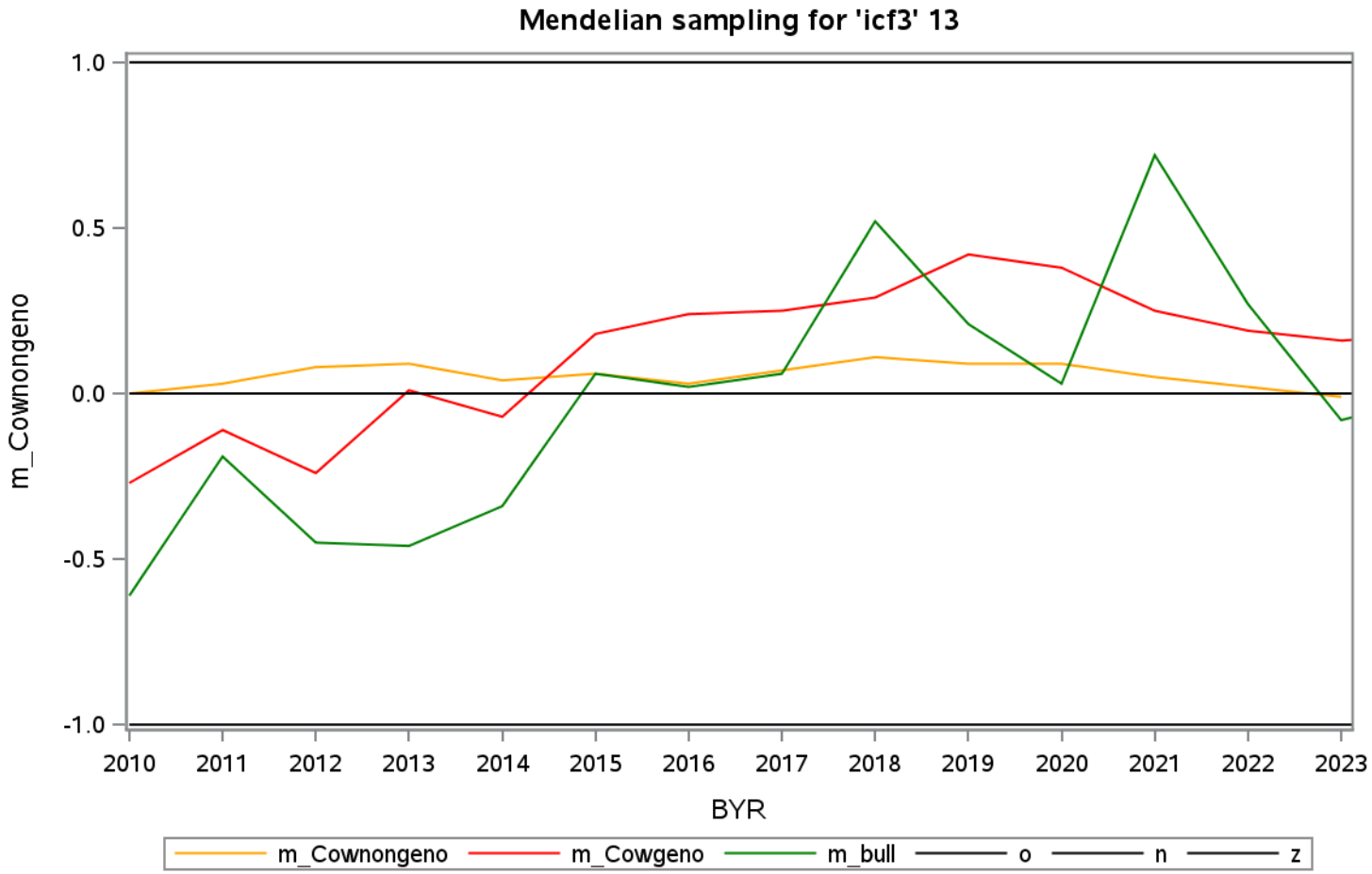
Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	0.00	-0.26	-0.76	22340	2211	243
2	2011	0.00	-0.14	-0.23	21767	4100	386
3	2012	-0.01	-0.31	-0.59	21791	4778	410
4	2013	0.01	-0.06	-0.54	19721	3812	415
5	2014	0.01	-0.12	-0.37	20259	4781	451
6	2015	0.06	0.19	0.05	19264	5739	535
7	2016	0.04	0.24	0.14	17576	6787	470
8	2017	0.07	0.25	0.13	16355	8436	546
9	2018	0.00	0.21	0.35	17235	10435	358
10	2019	0.03	0.27	-0.01	16682	12721	464
11	2020	0.01	0.27	-0.11	18327	15146	470
12	2021	0.03	0.27	0.57	21708	15086	412
13	2022	-0.02	0.17	0.21	17769	15695	463
14	2023	-0.04	0.13	-0.03	156	13972	562
15	2024	.	0.21	0.09	.	2713	141



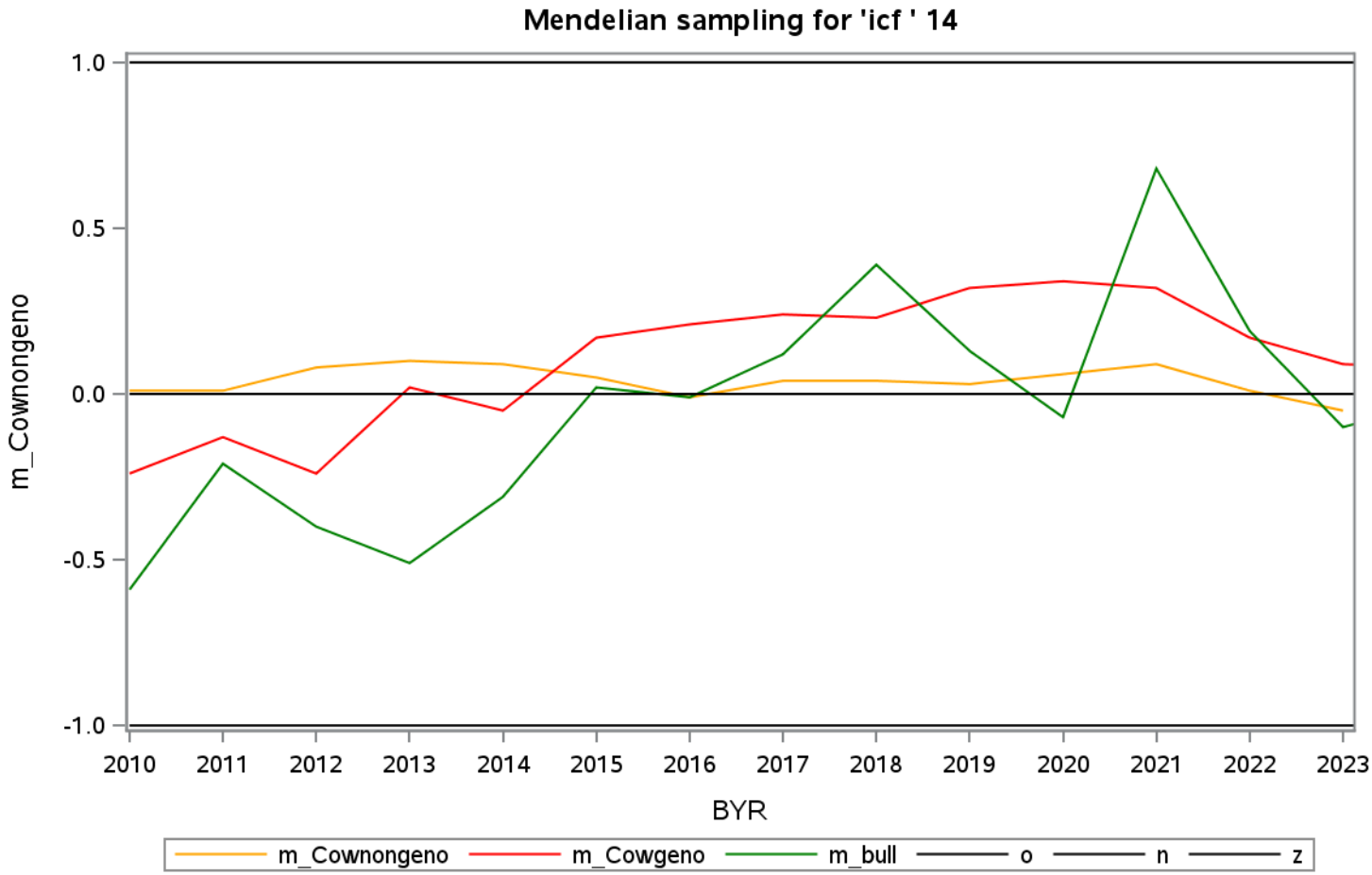
Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	0.04	-0.26	-0.66	22340	2211	243
2	2011	0.01	-0.14	-0.22	21767	4100	386
3	2012	0.05	-0.27	-0.38	21791	4778	410
4	2013	0.10	0.02	-0.47	19721	3812	415
5	2014	0.09	-0.03	-0.33	20259	4781	451
6	2015	0.10	0.22	0.03	19264	5739	535
7	2016	0.08	0.30	0.08	17576	6787	470
8	2017	0.07	0.26	0.15	16355	8436	546
9	2018	0.08	0.29	0.45	17235	10435	358
10	2019	0.05	0.37	0.13	16682	12721	464
11	2020	0.03	0.34	-0.01	18327	15146	470
12	2021	0.03	0.28	0.71	21708	15086	412
13	2022	0.03	0.21	0.15	17769	15695	463
14	2023	0.07	0.13	-0.08	156	13972	562
15	2024	.	0.08	-0.03	.	2713	141



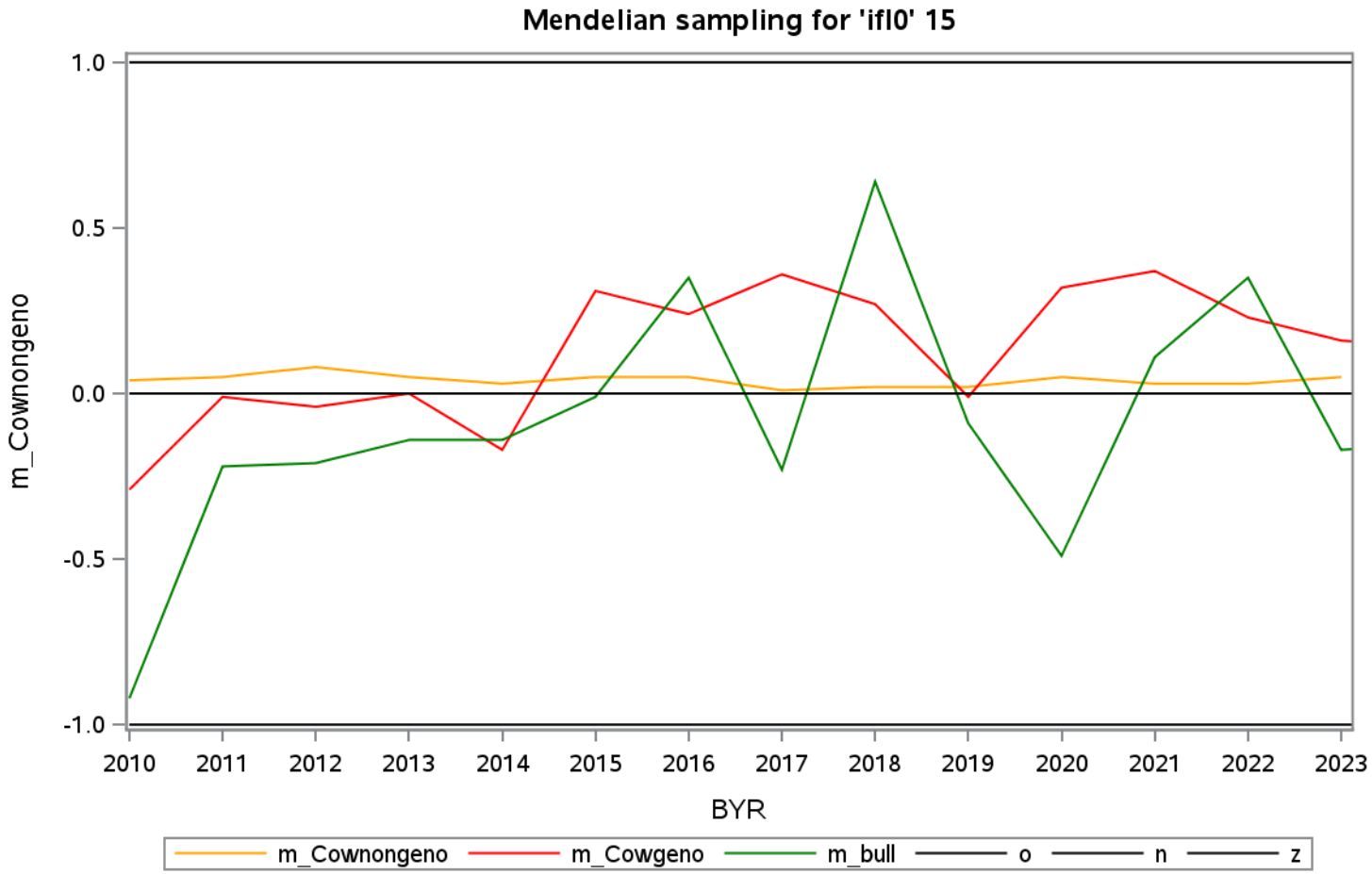
Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	0.00	-0.27	-0.61	22340	2211	243
2	2011	0.03	-0.11	-0.19	21767	4100	386
3	2012	0.08	-0.24	-0.45	21791	4778	410
4	2013	0.09	0.01	-0.46	19721	3812	415
5	2014	0.04	-0.07	-0.34	20259	4781	451
6	2015	0.06	0.18	0.06	19264	5739	535
7	2016	0.03	0.24	0.02	17576	6787	470
8	2017	0.07	0.25	0.06	16355	8436	546
9	2018	0.11	0.29	0.52	17235	10435	358
10	2019	0.09	0.42	0.21	16682	12721	464
11	2020	0.09	0.38	0.03	18327	15146	470
12	2021	0.05	0.25	0.72	21708	15086	412
13	2022	0.02	0.19	0.27	17769	15695	463
14	2023	-0.01	0.16	-0.08	156	13972	562
15	2024	.	0.18	-0.01	.	2713	141



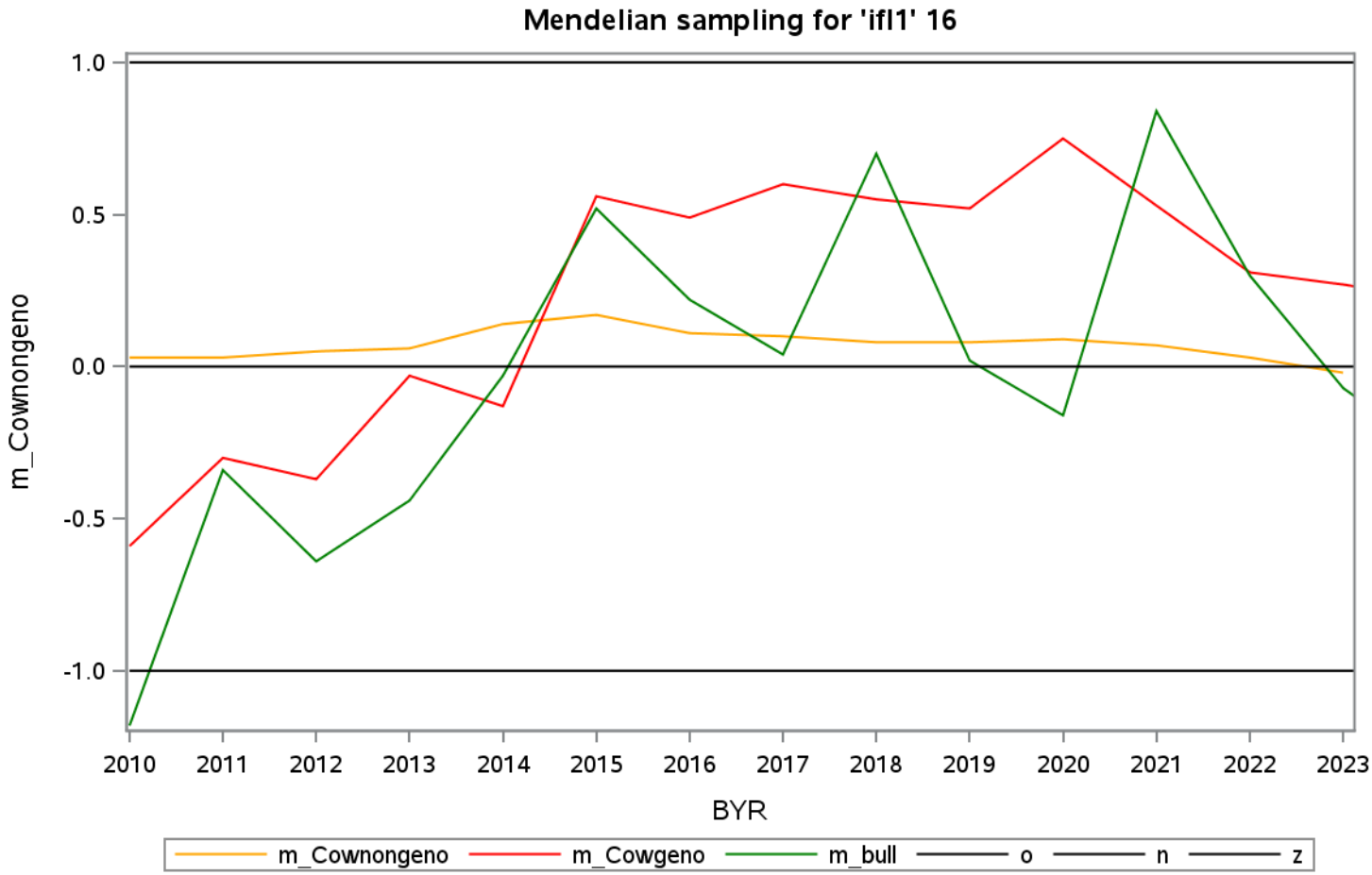
Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	0.01	-0.24	-0.59	22340	2211	243
2	2011	0.01	-0.13	-0.21	21767	4100	386
3	2012	0.08	-0.24	-0.40	21791	4778	410
4	2013	0.10	0.02	-0.51	19721	3812	415
5	2014	0.09	-0.05	-0.31	20259	4781	451
6	2015	0.05	0.17	0.02	19264	5739	535
7	2016	-0.01	0.21	-0.01	17576	6787	470
8	2017	0.04	0.24	0.12	16355	8436	546
9	2018	0.04	0.23	0.39	17235	10435	358
10	2019	0.03	0.32	0.13	16682	12721	464
11	2020	0.06	0.34	-0.07	18327	15146	470
12	2021	0.09	0.32	0.68	21708	15086	412
13	2022	0.01	0.17	0.19	17769	15695	463
14	2023	-0.05	0.09	-0.10	156	13972	562
15	2024	.	0.08	-0.02	.	2713	141



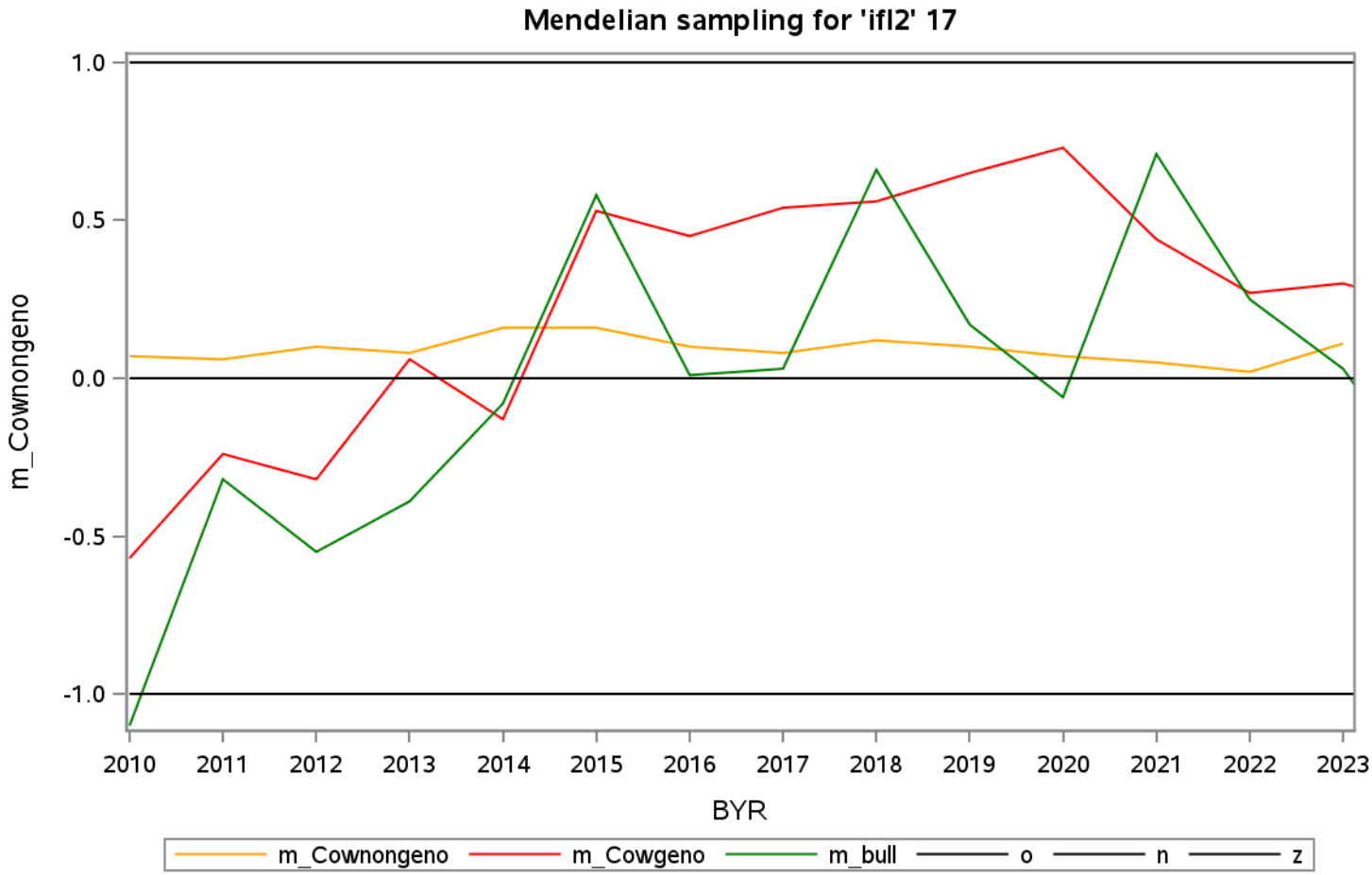
Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	0.04	-0.29	-0.92	22340	2211	243
2	2011	0.05	-0.01	-0.22	21767	4100	386
3	2012	0.08	-0.04	-0.21	21791	4778	410
4	2013	0.05	0.00	-0.14	19721	3812	415
5	2014	0.03	-0.17	-0.14	20259	4781	451
6	2015	0.05	0.31	-0.01	19264	5739	535
7	2016	0.05	0.24	0.35	17576	6787	470
8	2017	0.01	0.36	-0.23	16355	8436	546
9	2018	0.02	0.27	0.64	17235	10435	358
10	2019	0.02	-0.01	-0.09	16682	12721	464
11	2020	0.05	0.32	-0.49	18327	15146	470
12	2021	0.03	0.37	0.11	21708	15086	412
13	2022	0.03	0.23	0.35	17769	15695	463
14	2023	0.05	0.16	-0.17	156	13972	562
15	2024	.	0.14	-0.15	.	2713	141



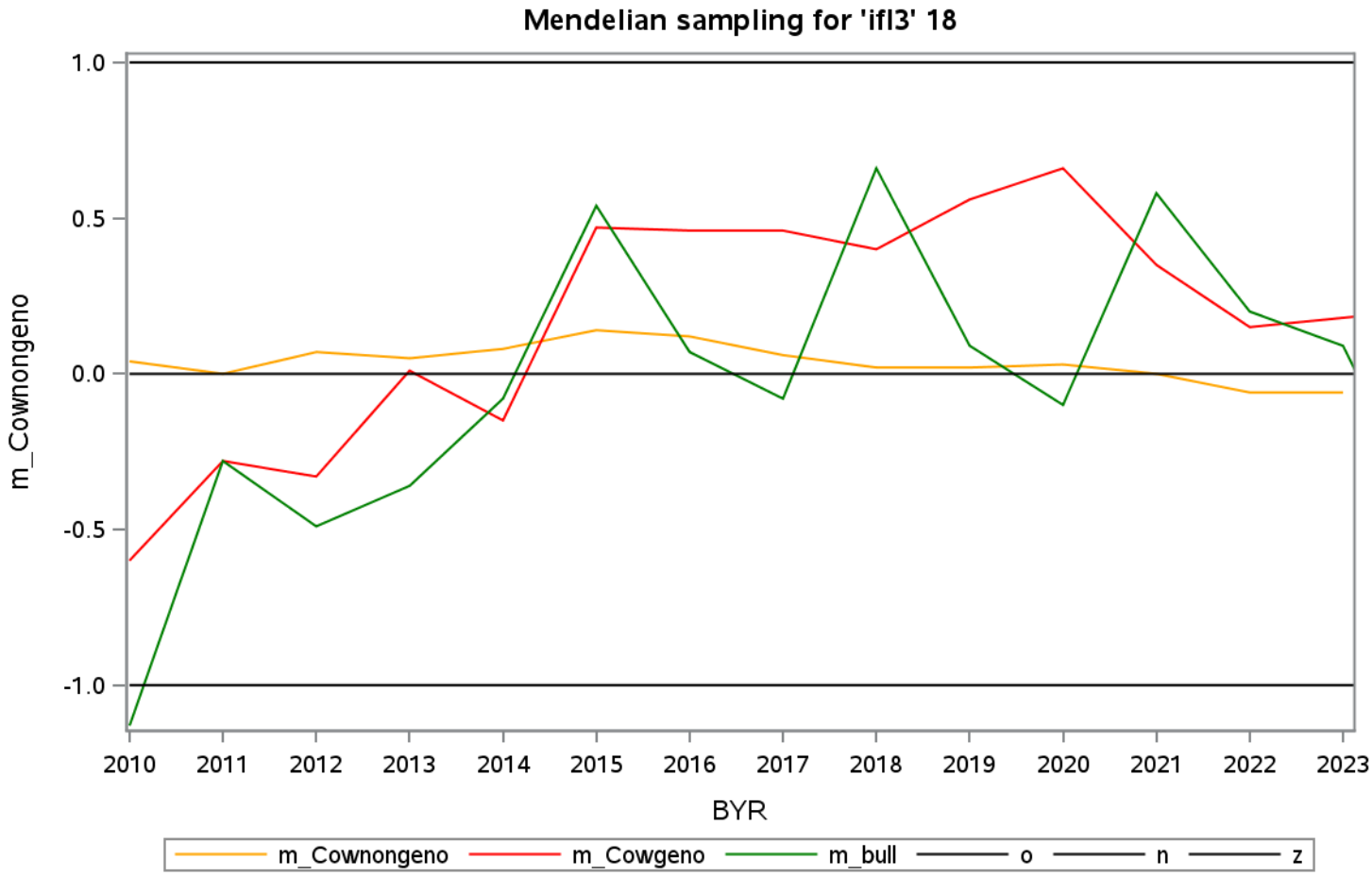
Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	0.03	-0.59	-1.18	22340	2211	243
2	2011	0.03	-0.30	-0.34	21767	4100	386
3	2012	0.05	-0.37	-0.64	21791	4778	410
4	2013	0.06	-0.03	-0.44	19721	3812	415
5	2014	0.14	-0.13	-0.03	20259	4781	451
6	2015	0.17	0.56	0.52	19264	5739	535
7	2016	0.11	0.49	0.22	17576	6787	470
8	2017	0.10	0.60	0.04	16355	8436	546
9	2018	0.08	0.55	0.70	17235	10435	358
10	2019	0.08	0.52	0.02	16682	12721	464
11	2020	0.09	0.75	-0.16	18327	15146	470
12	2021	0.07	0.53	0.84	21708	15086	412
13	2022	0.03	0.31	0.30	17769	15695	463
14	2023	-0.02	0.27	-0.07	156	13972	562
15	2024	.	0.22	-0.29	.	2713	141



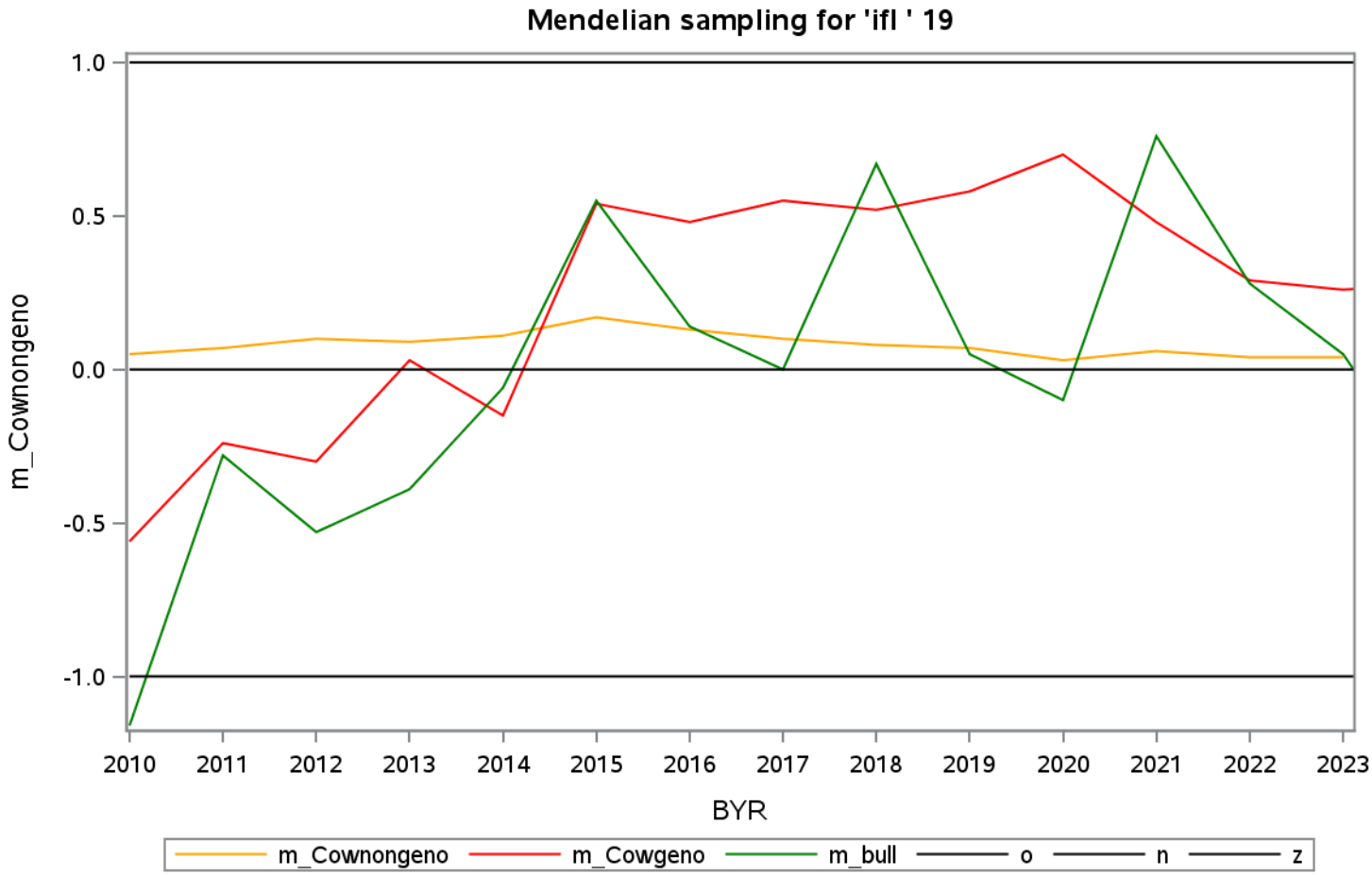
Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	0.07	-0.57	-1.10	22340	2211	243
2	2011	0.06	-0.24	-0.32	21767	4100	386
3	2012	0.10	-0.32	-0.55	21791	4778	410
4	2013	0.08	0.06	-0.39	19721	3812	415
5	2014	0.16	-0.13	-0.08	20259	4781	451
6	2015	0.16	0.53	0.58	19264	5739	535
7	2016	0.10	0.45	0.01	17576	6787	470
8	2017	0.08	0.54	0.03	16355	8436	546
9	2018	0.12	0.56	0.66	17235	10435	358
10	2019	0.10	0.65	0.17	16682	12721	464
11	2020	0.07	0.73	-0.06	18327	15146	470
12	2021	0.05	0.44	0.71	21708	15086	412
13	2022	0.02	0.27	0.25	17769	15695	463
14	2023	0.11	0.30	0.03	156	13972	562
15	2024	.	0.22	-0.38	.	2713	141



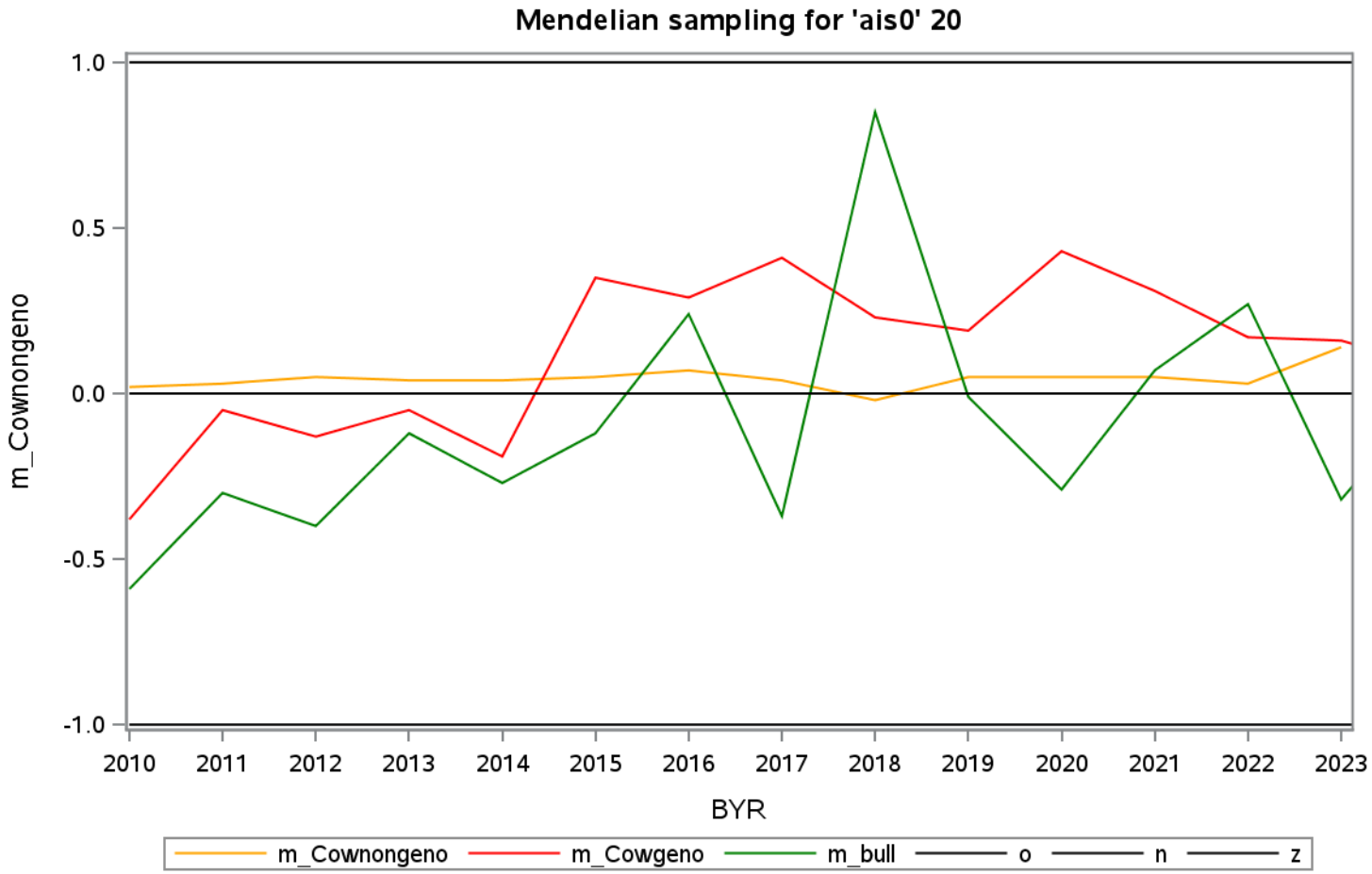
Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	0.04	-0.60	-1.13	22340	2211	243
2	2011	0.00	-0.28	-0.28	21767	4100	386
3	2012	0.07	-0.33	-0.49	21791	4778	410
4	2013	0.05	0.01	-0.36	19721	3812	415
5	2014	0.08	-0.15	-0.08	20259	4781	451
6	2015	0.14	0.47	0.54	19264	5739	535
7	2016	0.12	0.46	0.07	17576	6787	470
8	2017	0.06	0.46	-0.08	16355	8436	546
9	2018	0.02	0.40	0.66	17235	10435	358
10	2019	0.02	0.56	0.09	16682	12721	464
11	2020	0.03	0.66	-0.10	18327	15146	470
12	2021	0.00	0.35	0.58	21708	15086	412
13	2022	-0.06	0.15	0.20	17769	15695	463
14	2023	-0.06	0.18	0.09	156	13972	562
15	2024	.	0.21	-0.52	.	2713	141



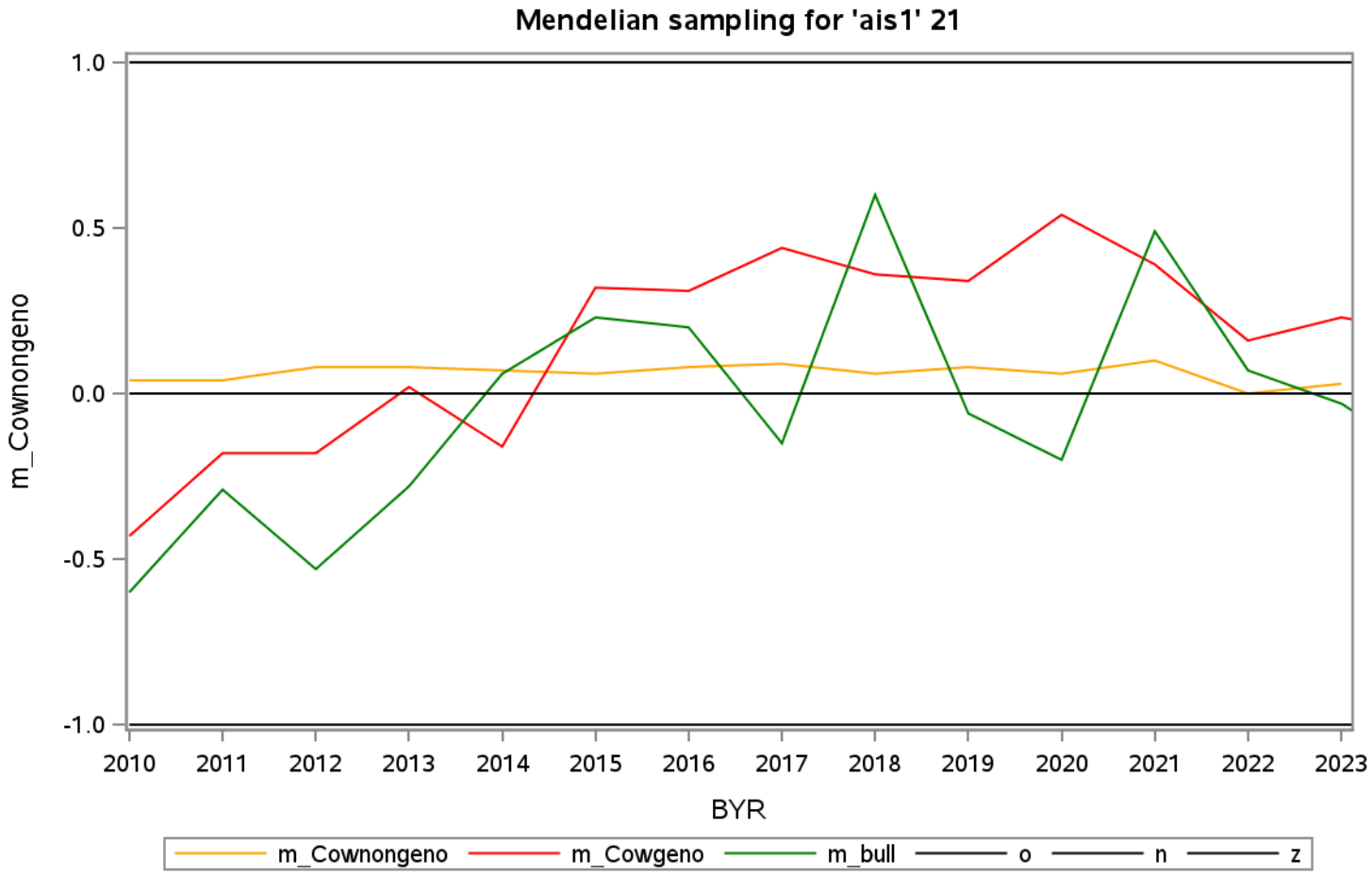
Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	0.05	-0.56	-1.16	22340	2211	243
2	2011	0.07	-0.24	-0.28	21767	4100	386
3	2012	0.10	-0.30	-0.53	21791	4778	410
4	2013	0.09	0.03	-0.39	19721	3812	415
5	2014	0.11	-0.15	-0.06	20259	4781	451
6	2015	0.17	0.54	0.55	19264	5739	535
7	2016	0.13	0.48	0.14	17576	6787	470
8	2017	0.10	0.55	0.00	16355	8436	546
9	2018	0.08	0.52	0.67	17235	10435	358
10	2019	0.07	0.58	0.05	16682	12721	464
11	2020	0.03	0.70	-0.10	18327	15146	470
12	2021	0.06	0.48	0.76	21708	15086	412
13	2022	0.04	0.29	0.28	17769	15695	463
14	2023	0.04	0.26	0.05	156	13972	562
15	2024	.	0.28	-0.39	.	2713	141



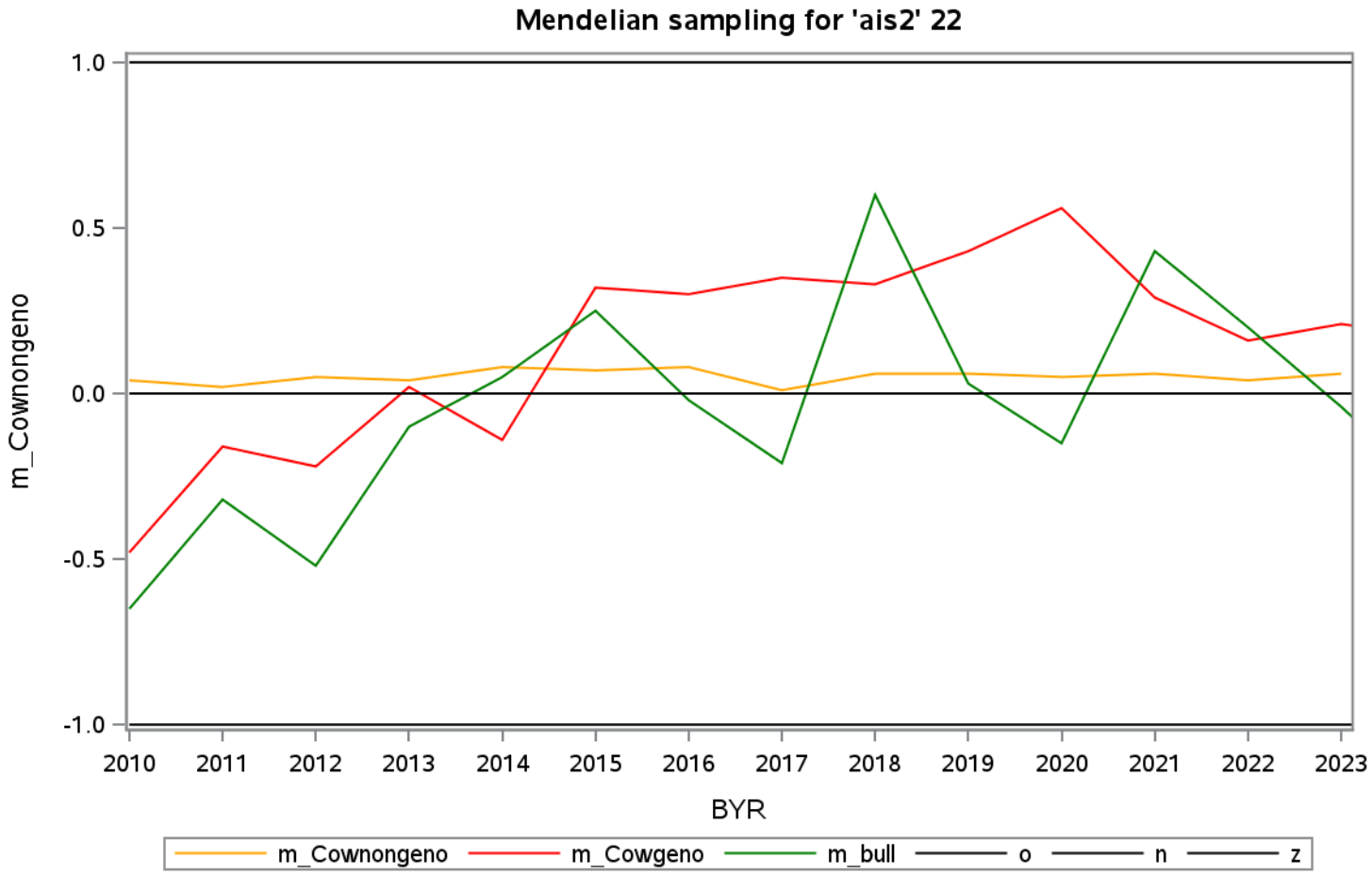
Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	0.02	-0.38	-0.59	22340	2211	243
2	2011	0.03	-0.05	-0.30	21767	4100	386
3	2012	0.05	-0.13	-0.40	21791	4778	410
4	2013	0.04	-0.05	-0.12	19721	3812	415
5	2014	0.04	-0.19	-0.27	20259	4781	451
6	2015	0.05	0.35	-0.12	19264	5739	535
7	2016	0.07	0.29	0.24	17576	6787	470
8	2017	0.04	0.41	-0.37	16355	8436	546
9	2018	-0.02	0.23	0.85	17235	10435	358
10	2019	0.05	0.19	-0.01	16682	12721	464
11	2020	0.05	0.43	-0.29	18327	15146	470
12	2021	0.05	0.31	0.07	21708	15086	412
13	2022	0.03	0.17	0.27	17769	15695	463
14	2023	0.14	0.16	-0.32	156	13972	562
15	2024	.	0.08	0.01	.	2713	141



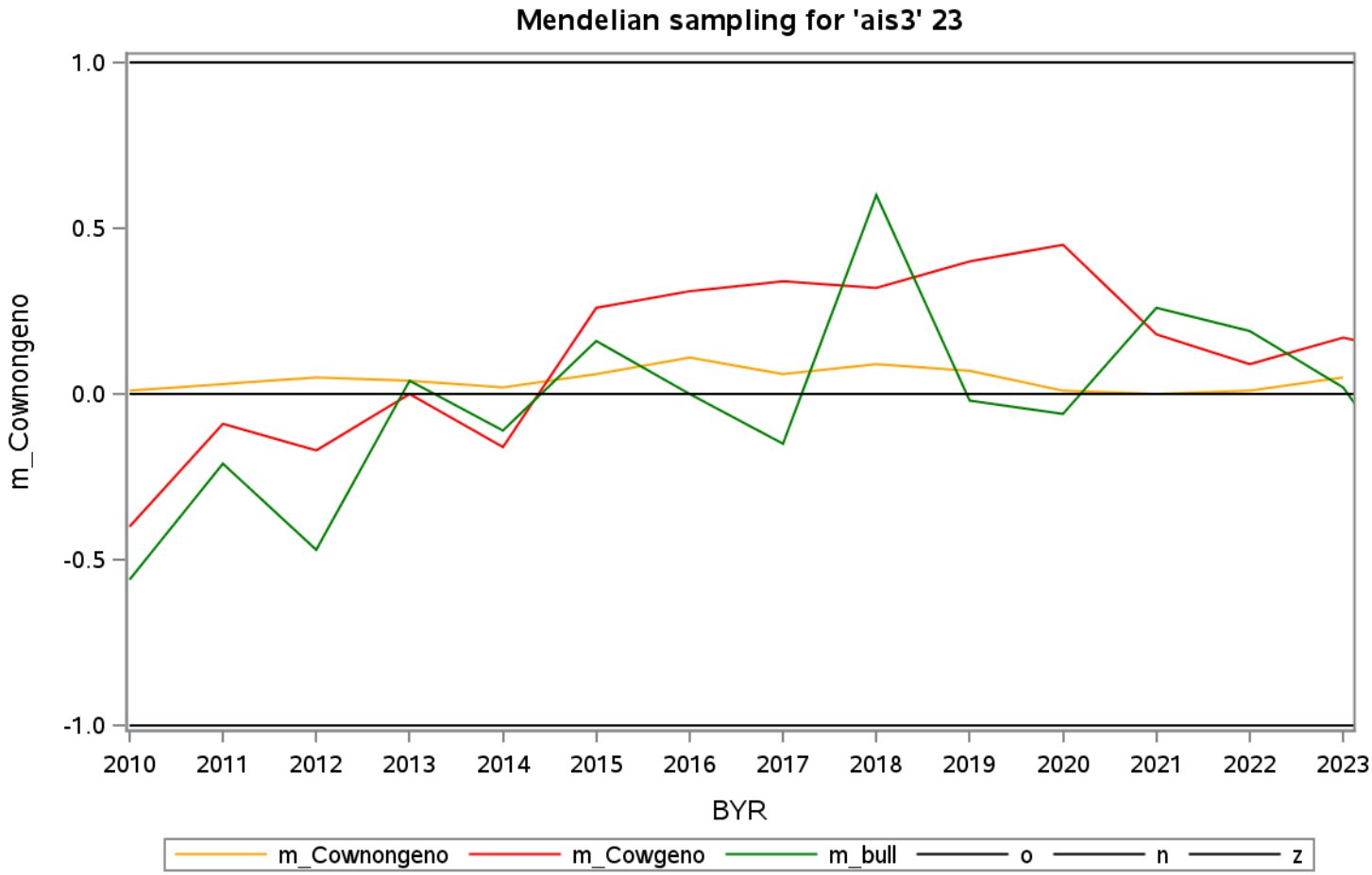
Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	0.04	-0.43	-0.60	22340	2211	243
2	2011	0.04	-0.18	-0.29	21767	4100	386
3	2012	0.08	-0.18	-0.53	21791	4778	410
4	2013	0.08	0.02	-0.28	19721	3812	415
5	2014	0.07	-0.16	0.06	20259	4781	451
6	2015	0.06	0.32	0.23	19264	5739	535
7	2016	0.08	0.31	0.20	17576	6787	470
8	2017	0.09	0.44	-0.15	16355	8436	546
9	2018	0.06	0.36	0.60	17235	10435	358
10	2019	0.08	0.34	-0.06	16682	12721	464
11	2020	0.06	0.54	-0.20	18327	15146	470
12	2021	0.10	0.39	0.49	21708	15086	412
13	2022	0.00	0.16	0.07	17769	15695	463
14	2023	0.03	0.23	-0.03	156	13972	562
15	2024	.	0.18	-0.21	.	2713	141



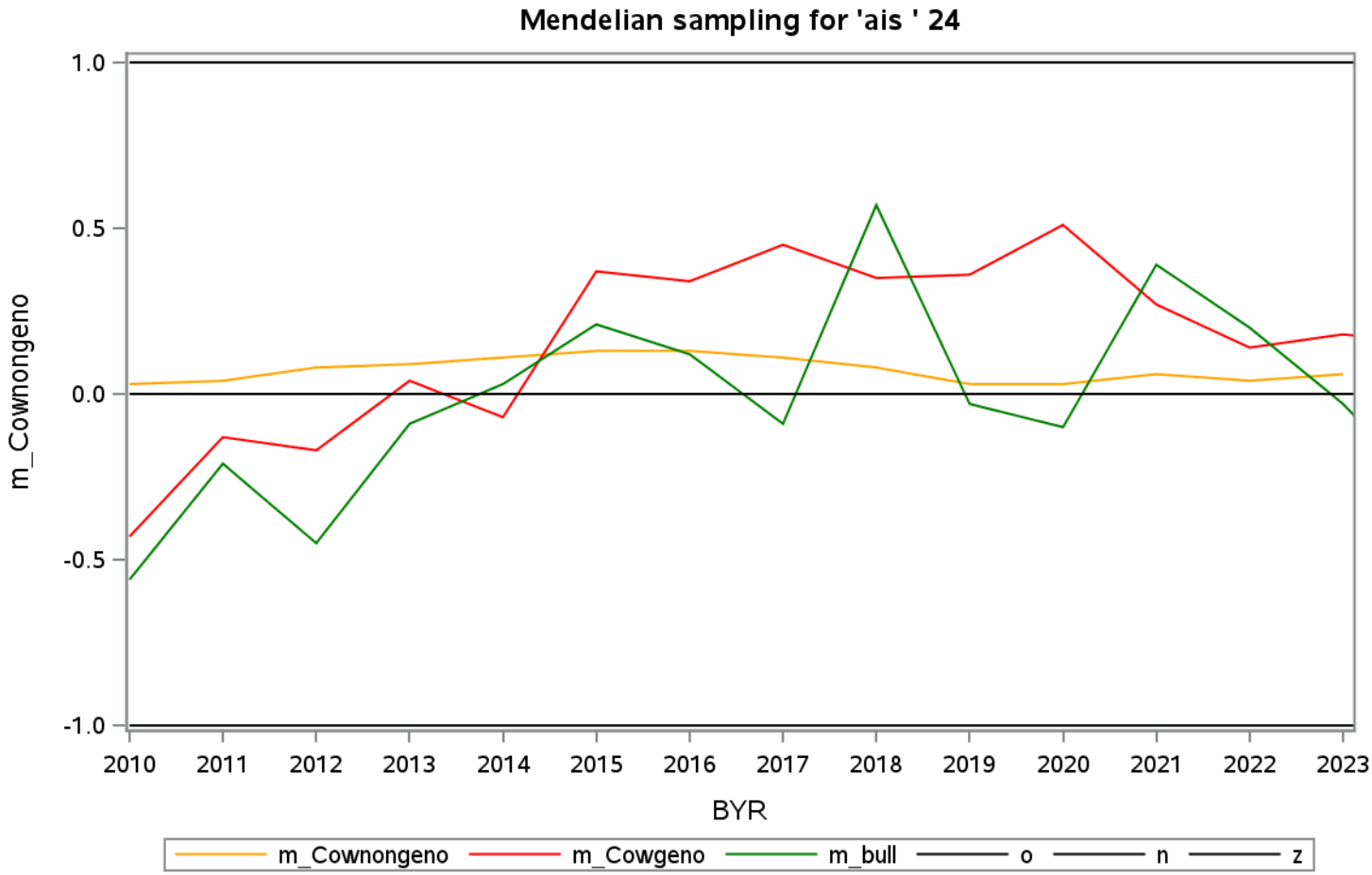
Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	0.04	-0.48	-0.65	22340	2211	243
2	2011	0.02	-0.16	-0.32	21767	4100	386
3	2012	0.05	-0.22	-0.52	21791	4778	410
4	2013	0.04	0.02	-0.10	19721	3812	415
5	2014	0.08	-0.14	0.05	20259	4781	451
6	2015	0.07	0.32	0.25	19264	5739	535
7	2016	0.08	0.30	-0.02	17576	6787	470
8	2017	0.01	0.35	-0.21	16355	8436	546
9	2018	0.06	0.33	0.60	17235	10435	358
10	2019	0.06	0.43	0.03	16682	12721	464
11	2020	0.05	0.56	-0.15	18327	15146	470
12	2021	0.06	0.29	0.43	21708	15086	412
13	2022	0.04	0.16	0.20	17769	15695	463
14	2023	0.06	0.21	-0.04	156	13972	562
15	2024	.	0.17	-0.30	.	2713	141



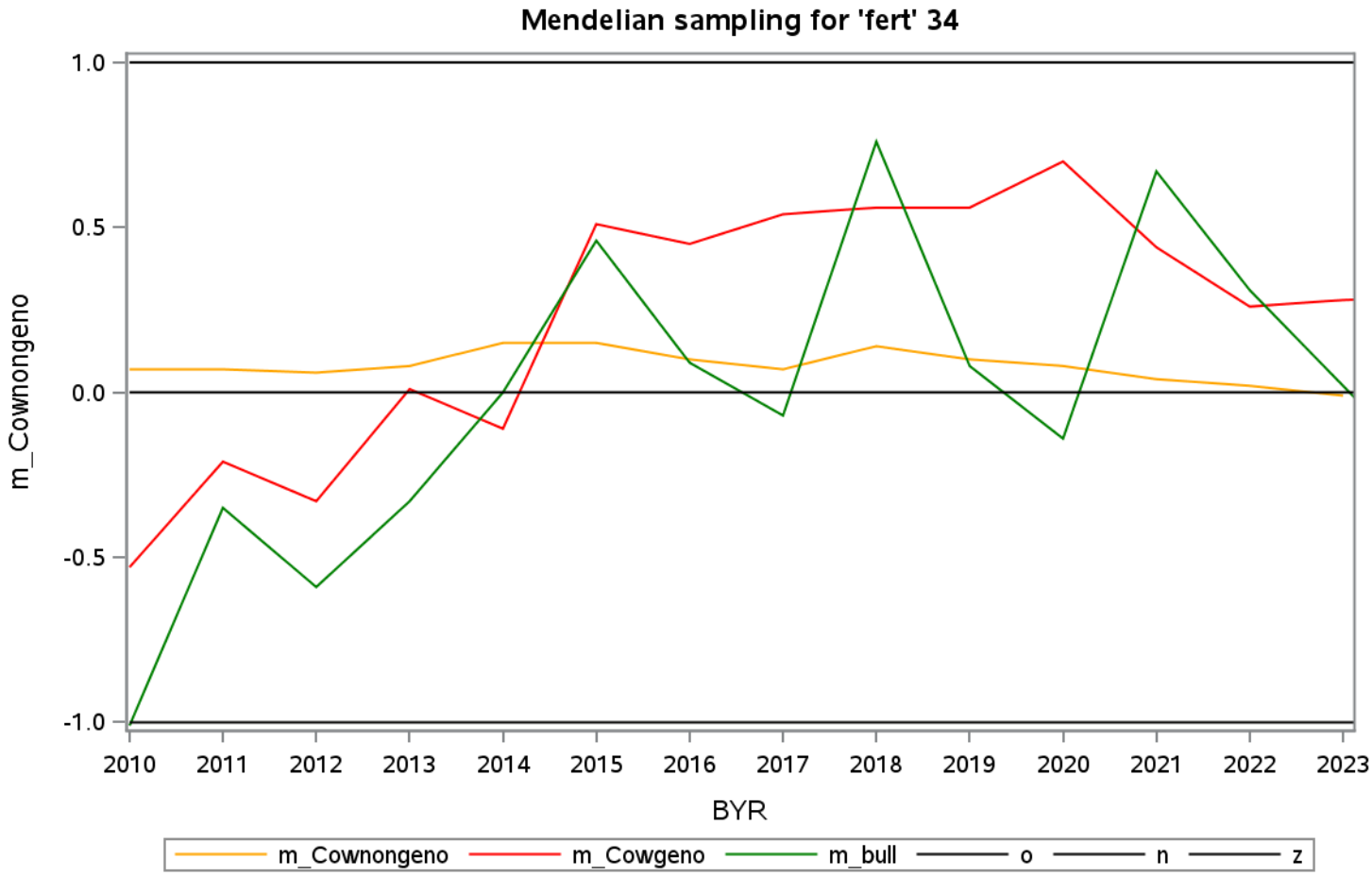
Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	0.01	-0.40	-0.56	22340	2211	243
2	2011	0.03	-0.09	-0.21	21767	4100	386
3	2012	0.05	-0.17	-0.47	21791	4778	410
4	2013	0.04	0.00	0.04	19721	3812	415
5	2014	0.02	-0.16	-0.11	20259	4781	451
6	2015	0.06	0.26	0.16	19264	5739	535
7	2016	0.11	0.31	0.00	17576	6787	470
8	2017	0.06	0.34	-0.15	16355	8436	546
9	2018	0.09	0.32	0.60	17235	10435	358
10	2019	0.07	0.40	-0.02	16682	12721	464
11	2020	0.01	0.45	-0.06	18327	15146	470
12	2021	0.00	0.18	0.26	21708	15086	412
13	2022	0.01	0.09	0.19	17769	15695	463
14	2023	0.05	0.17	0.02	156	13972	562
15	2024	.	0.11	-0.37	.	2713	141



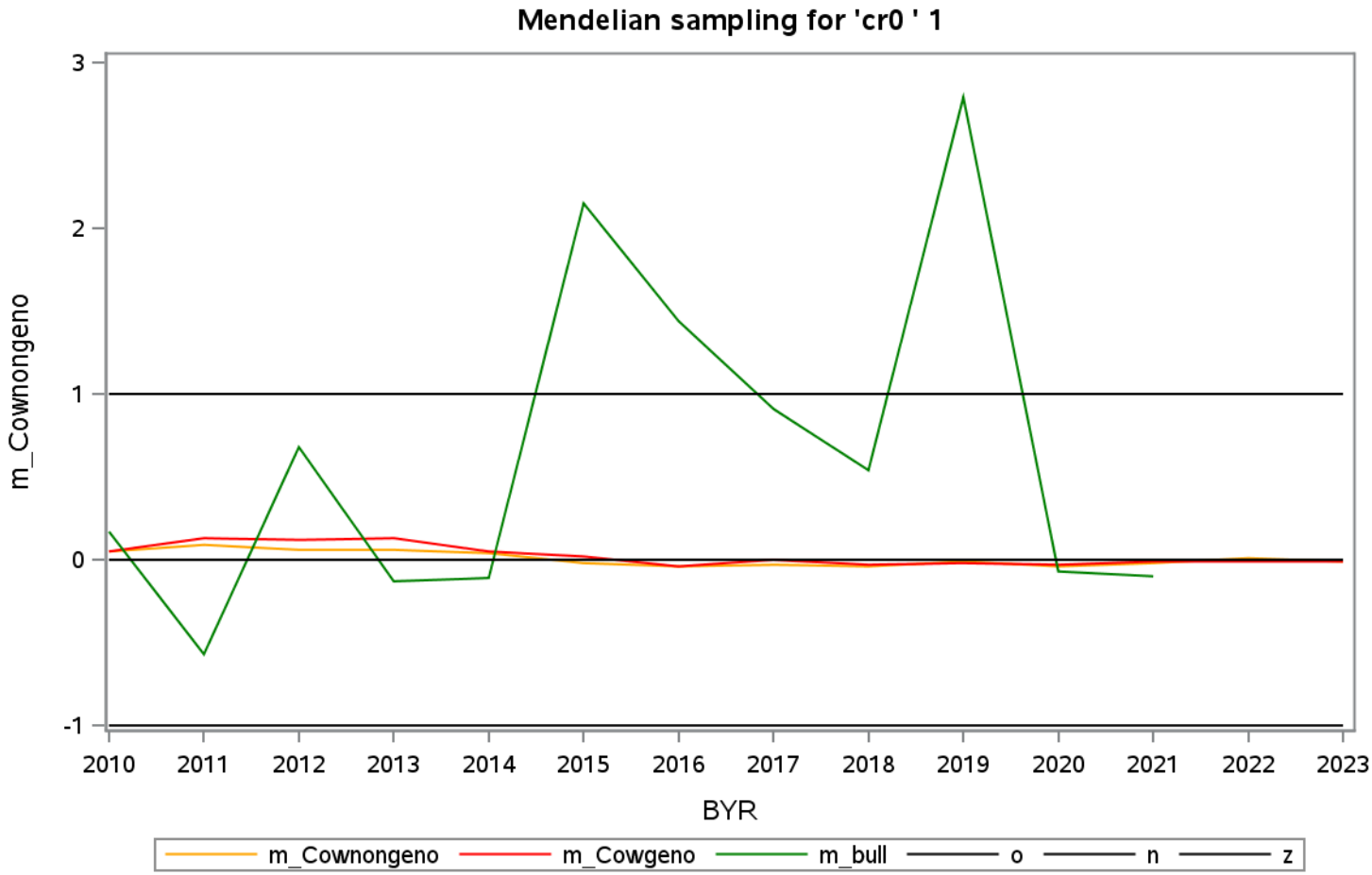
Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	0.03	-0.43	-0.56	22340	2211	243
2	2011	0.04	-0.13	-0.21	21767	4100	386
3	2012	0.08	-0.17	-0.45	21791	4778	410
4	2013	0.09	0.04	-0.09	19721	3812	415
5	2014	0.11	-0.07	0.03	20259	4781	451
6	2015	0.13	0.37	0.21	19264	5739	535
7	2016	0.13	0.34	0.12	17576	6787	470
8	2017	0.11	0.45	-0.09	16355	8436	546
9	2018	0.08	0.35	0.57	17235	10435	358
10	2019	0.03	0.36	-0.03	16682	12721	464
11	2020	0.03	0.51	-0.10	18327	15146	470
12	2021	0.06	0.27	0.39	21708	15086	412
13	2022	0.04	0.14	0.20	17769	15695	463
14	2023	0.06	0.18	-0.03	156	13972	562
15	2024	.	0.15	-0.32	.	2713	141



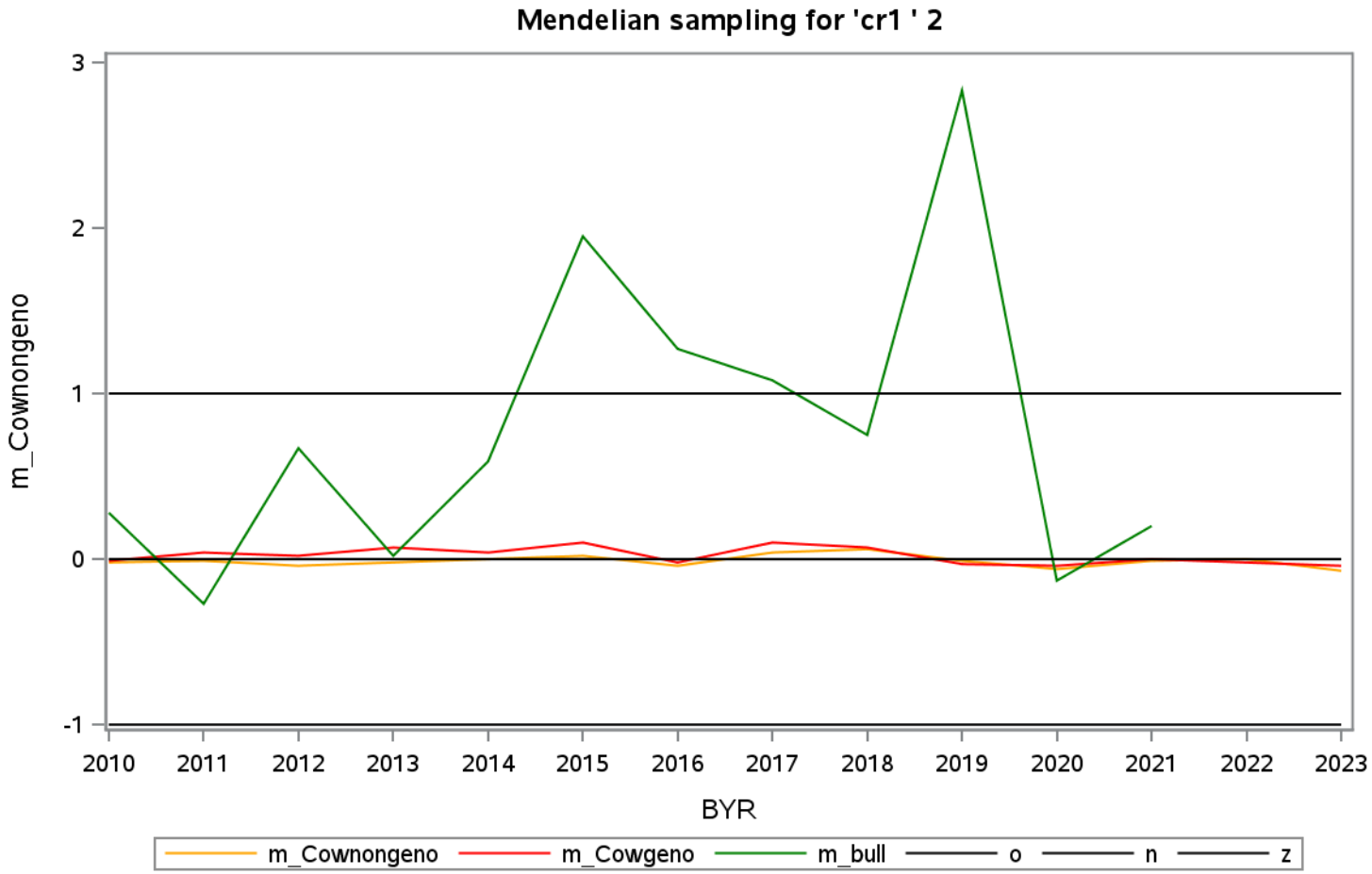
Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	0.07	-0.53	-1.01	22340	2211	243
2	2011	0.07	-0.21	-0.35	21767	4100	386
3	2012	0.06	-0.33	-0.59	21791	4778	410
4	2013	0.08	0.01	-0.33	19721	3812	415
5	2014	0.15	-0.11	0.00	20259	4781	451
6	2015	0.15	0.51	0.46	19264	5739	535
7	2016	0.10	0.45	0.09	17576	6787	470
8	2017	0.07	0.54	-0.07	16355	8436	546
9	2018	0.14	0.56	0.76	17235	10435	358
10	2019	0.10	0.56	0.08	16682	12721	464
11	2020	0.08	0.70	-0.14	18327	15146	470
12	2021	0.04	0.44	0.67	21708	15086	412
13	2022	0.02	0.26	0.31	17769	15695	463
14	2023	-0.01	0.28	0.02	156	13972	562
15	2024	.	0.29	-0.27	.	2713	141



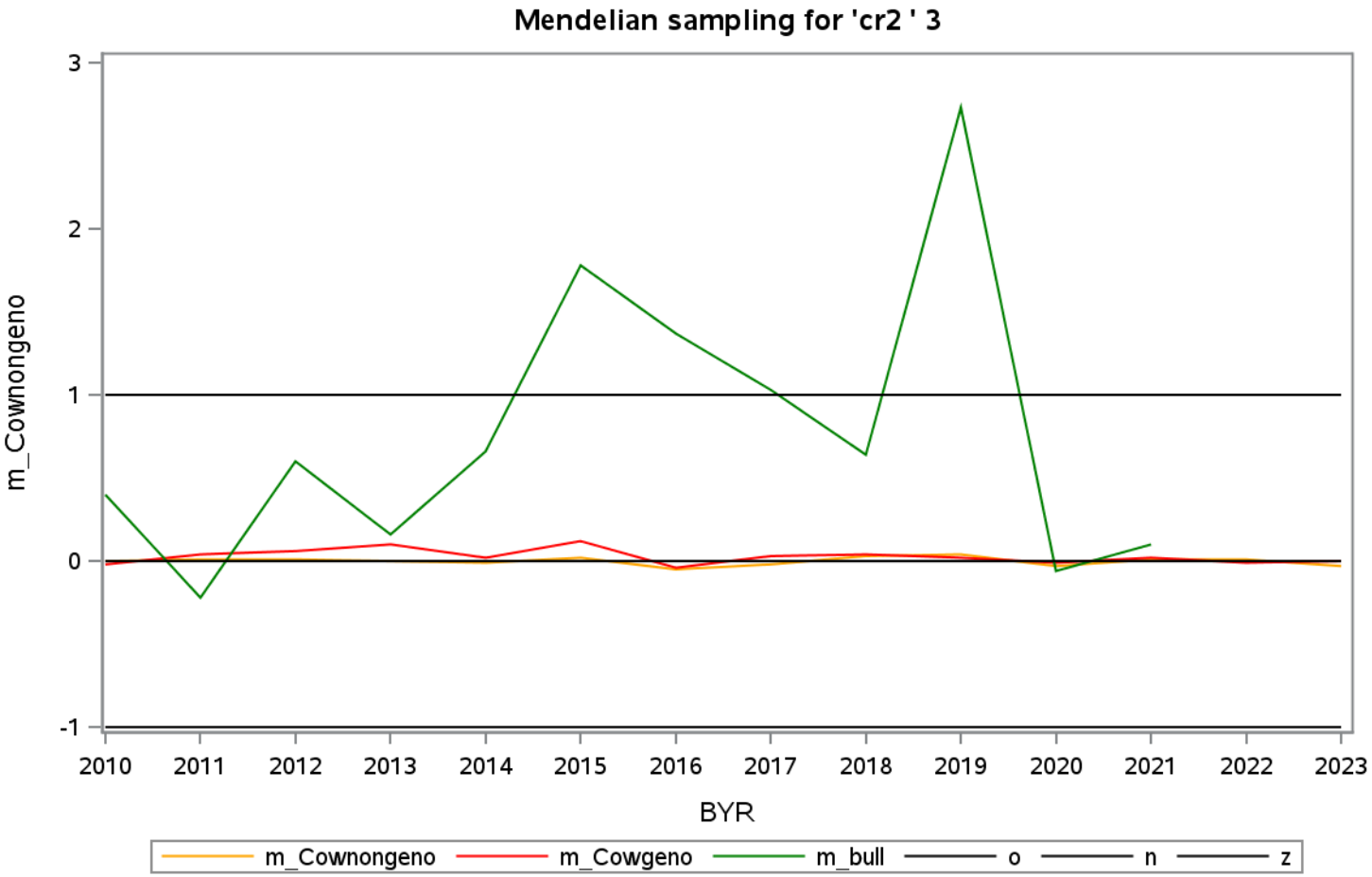
Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	0.05	0.05	0.17	22351	2194	90
2	2011	0.09	0.13	-0.57	21784	3969	86
3	2012	0.06	0.12	0.68	21806	4369	66
4	2013	0.06	0.13	-0.13	19734	3273	62
5	2014	0.04	0.05	-0.11	20270	3924	79
6	2015	-0.02	0.02	2.15	19278	4017	57
7	2016	-0.04	-0.04	1.44	17581	4377	66
8	2017	-0.03	0.00	0.91	16359	5810	88
9	2018	-0.04	-0.03	0.54	17237	7415	55
10	2019	-0.01	-0.02	2.79	16687	8882	57
11	2020	-0.04	-0.03	-0.07	18341	10628	43
12	2021	-0.02	-0.01	-0.10	21829	13589	5
13	2022	0.01	-0.01	.	19782	13036	.
14	2023	-0.01	-0.01	.	1468	1177	.



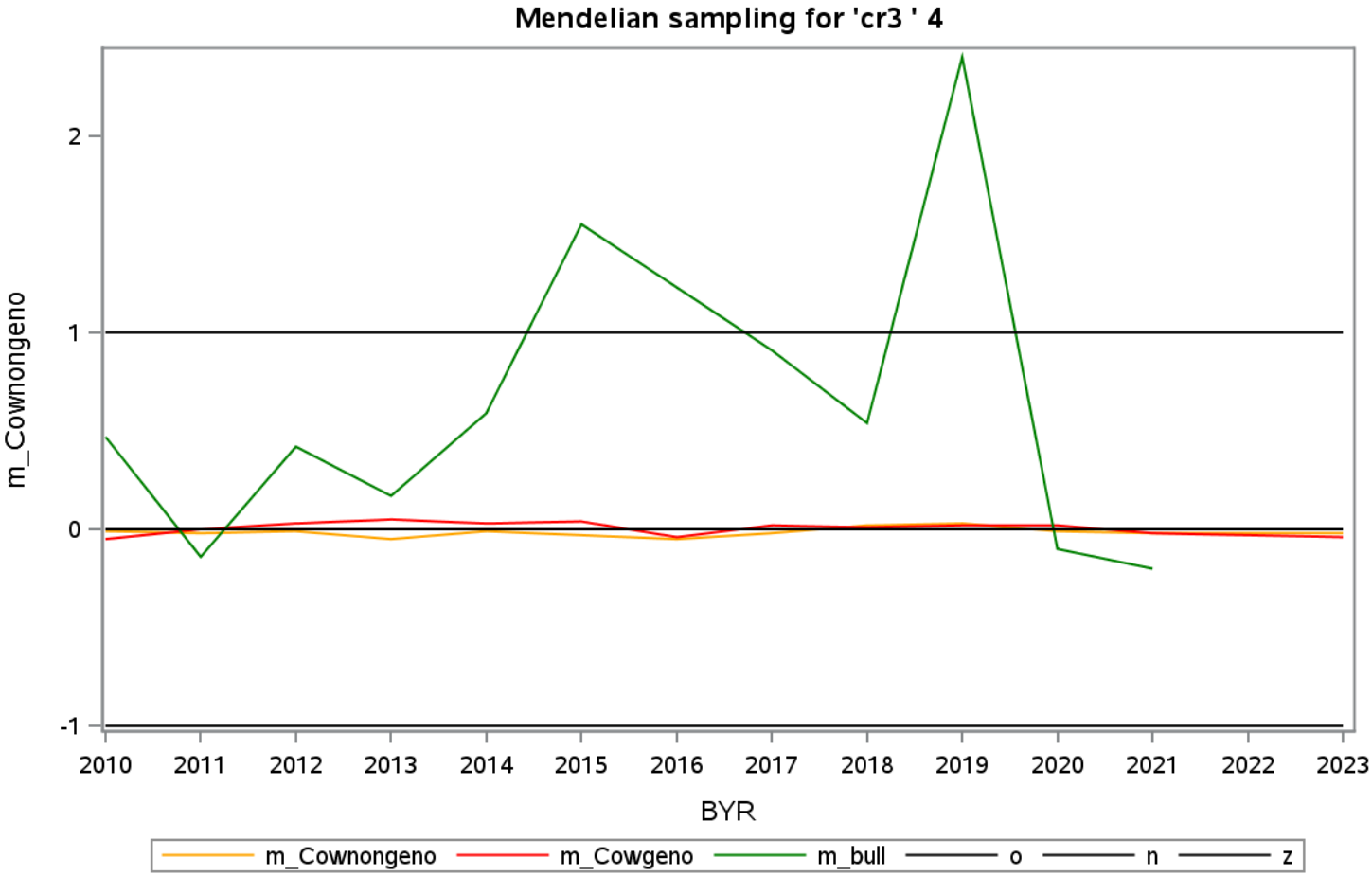
Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	-0.02	-0.01	0.28	22351	2194	90
2	2011	-0.01	0.04	-0.27	21784	3969	86
3	2012	-0.04	0.02	0.67	21806	4369	66
4	2013	-0.02	0.07	0.02	19734	3273	62
5	2014	0.00	0.04	0.59	20270	3924	79
6	2015	0.02	0.10	1.95	19278	4017	57
7	2016	-0.04	-0.02	1.27	17581	4377	66
8	2017	0.04	0.10	1.08	16359	5810	88
9	2018	0.06	0.07	0.75	17237	7415	55
10	2019	-0.01	-0.03	2.83	16687	8882	57
11	2020	-0.06	-0.04	-0.13	18341	10628	43
12	2021	-0.01	0.00	0.20	21829	13589	5
13	2022	0.00	-0.02	.	19782	13036	.
14	2023	-0.07	-0.04	.	1468	1177	.



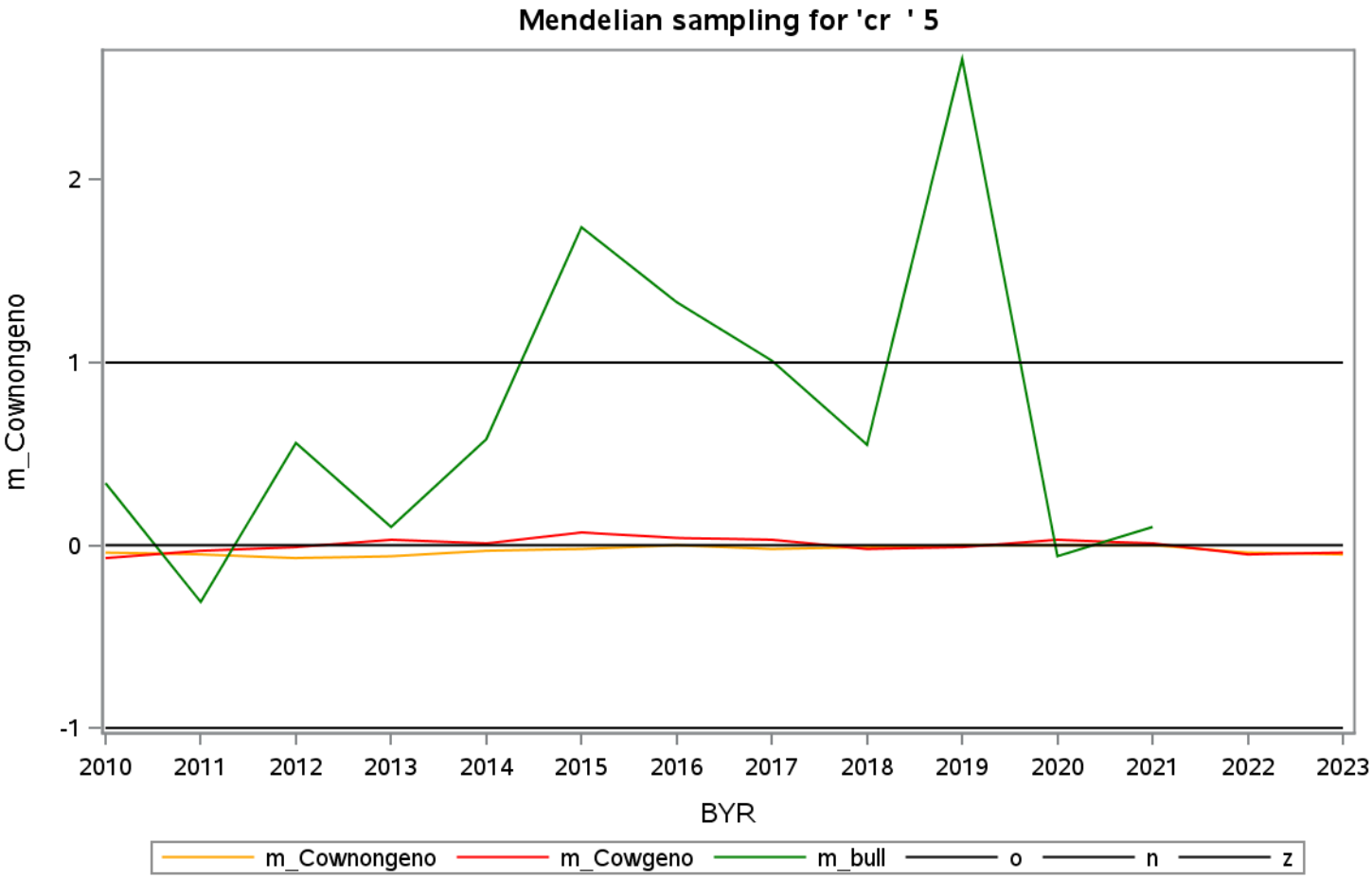
Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	0.00	-0.02	0.40	22351	2194	90
2	2011	0.01	0.04	-0.22	21784	3969	86
3	2012	0.01	0.06	0.60	21806	4369	66
4	2013	0.00	0.10	0.16	19734	3273	62
5	2014	-0.01	0.02	0.66	20270	3924	79
6	2015	0.02	0.12	1.78	19278	4017	57
7	2016	-0.05	-0.04	1.37	17581	4377	66
8	2017	-0.02	0.03	1.03	16359	5810	88
9	2018	0.03	0.04	0.64	17237	7415	55
10	2019	0.04	0.02	2.73	16687	8882	57
11	2020	-0.03	-0.01	-0.06	18341	10628	43
12	2021	0.01	0.02	0.10	21829	13589	5
13	2022	0.01	-0.01	.	19782	13036	.
14	2023	-0.03	0.00	.	1468	1177	.



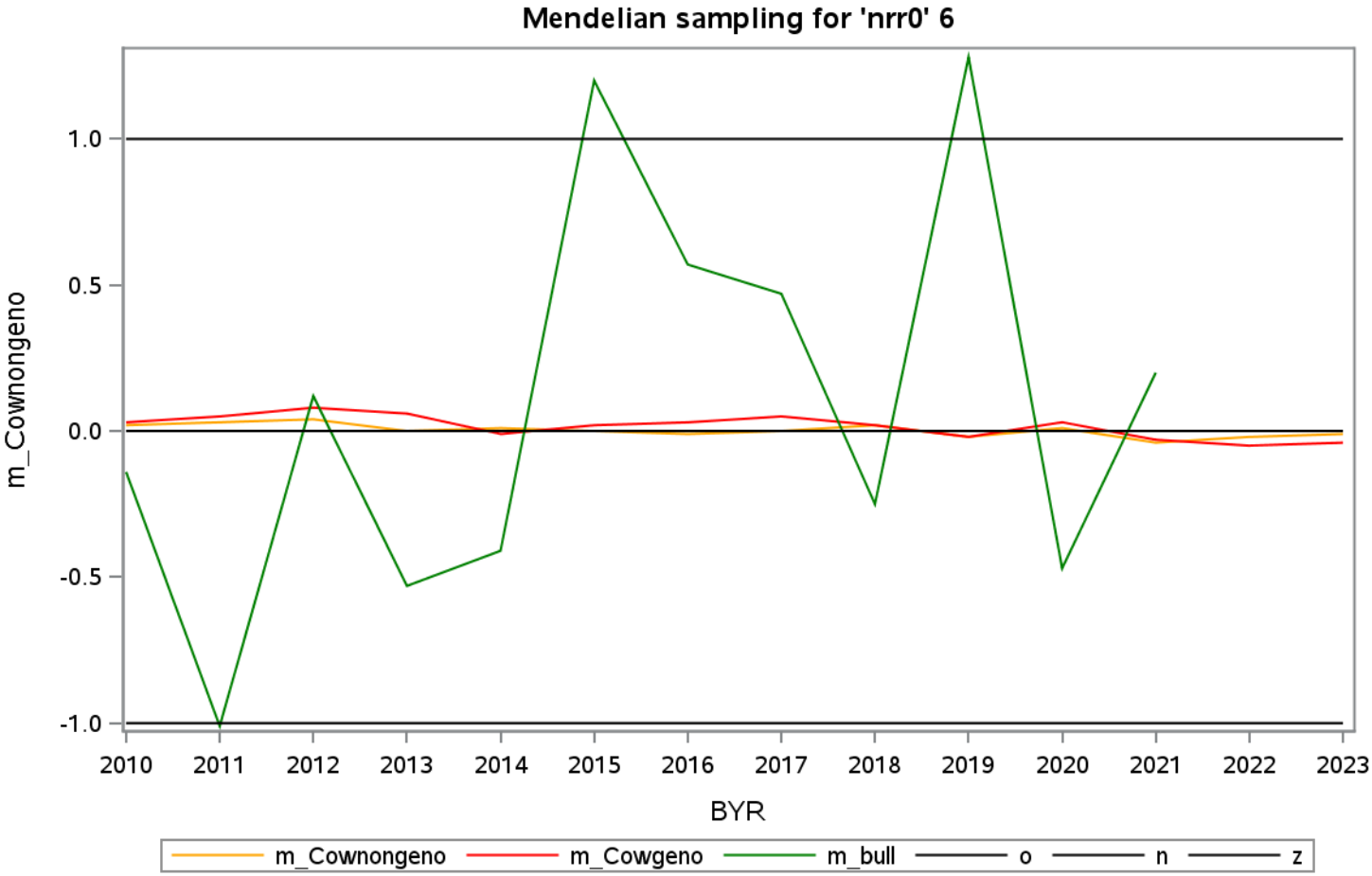
Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	-0.01	-0.05	0.47	22351	2194	90
2	2011	-0.02	0.00	-0.14	21784	3969	86
3	2012	-0.01	0.03	0.42	21806	4369	66
4	2013	-0.05	0.05	0.17	19734	3273	62
5	2014	-0.01	0.03	0.59	20270	3924	79
6	2015	-0.03	0.04	1.55	19278	4017	57
7	2016	-0.05	-0.04	1.23	17581	4377	66
8	2017	-0.02	0.02	0.91	16359	5810	88
9	2018	0.02	0.01	0.54	17237	7415	55
10	2019	0.03	0.02	2.40	16687	8882	57
11	2020	-0.01	0.02	-0.10	18341	10628	43
12	2021	-0.02	-0.02	-0.20	21829	13589	5
13	2022	-0.02	-0.03	.	19782	13036	.
14	2023	-0.02	-0.04	.	1468	1177	.



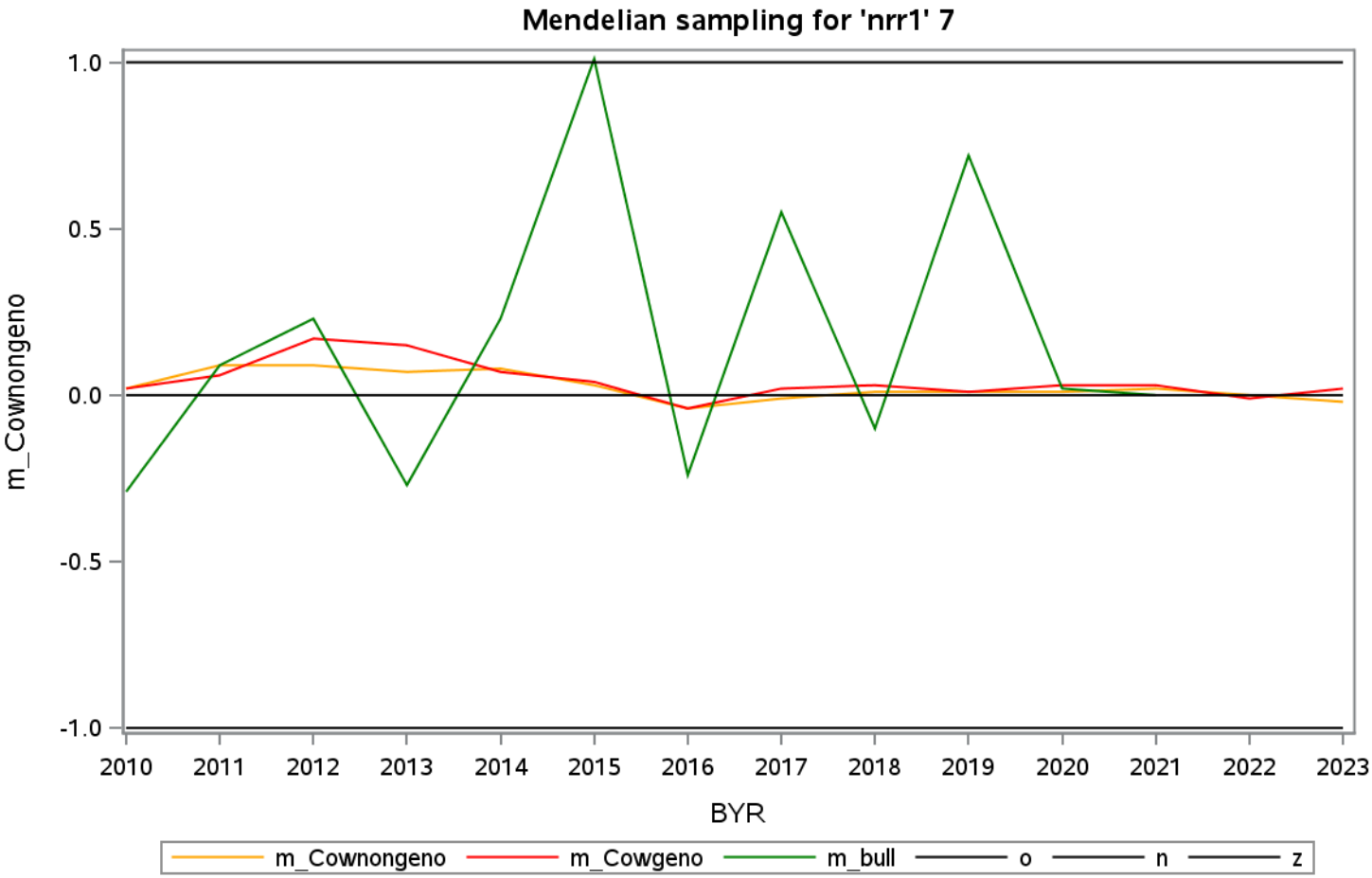
Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	-0.04	-0.07	0.34	22351	2194	90
2	2011	-0.05	-0.03	-0.31	21784	3969	86
3	2012	-0.07	-0.01	0.56	21806	4369	66
4	2013	-0.06	0.03	0.10	19734	3273	62
5	2014	-0.03	0.01	0.58	20270	3924	79
6	2015	-0.02	0.07	1.74	19278	4017	57
7	2016	0.00	0.04	1.33	17581	4377	66
8	2017	-0.02	0.03	1.01	16359	5810	88
9	2018	-0.01	-0.02	0.55	17237	7415	55
10	2019	0.00	-0.01	2.66	16687	8882	57
11	2020	0.00	0.03	-0.06	18341	10628	43
12	2021	0.00	0.01	0.10	21829	13589	5
13	2022	-0.04	-0.05	.	19782	13036	.
14	2023	-0.05	-0.04	.	1468	1177	.



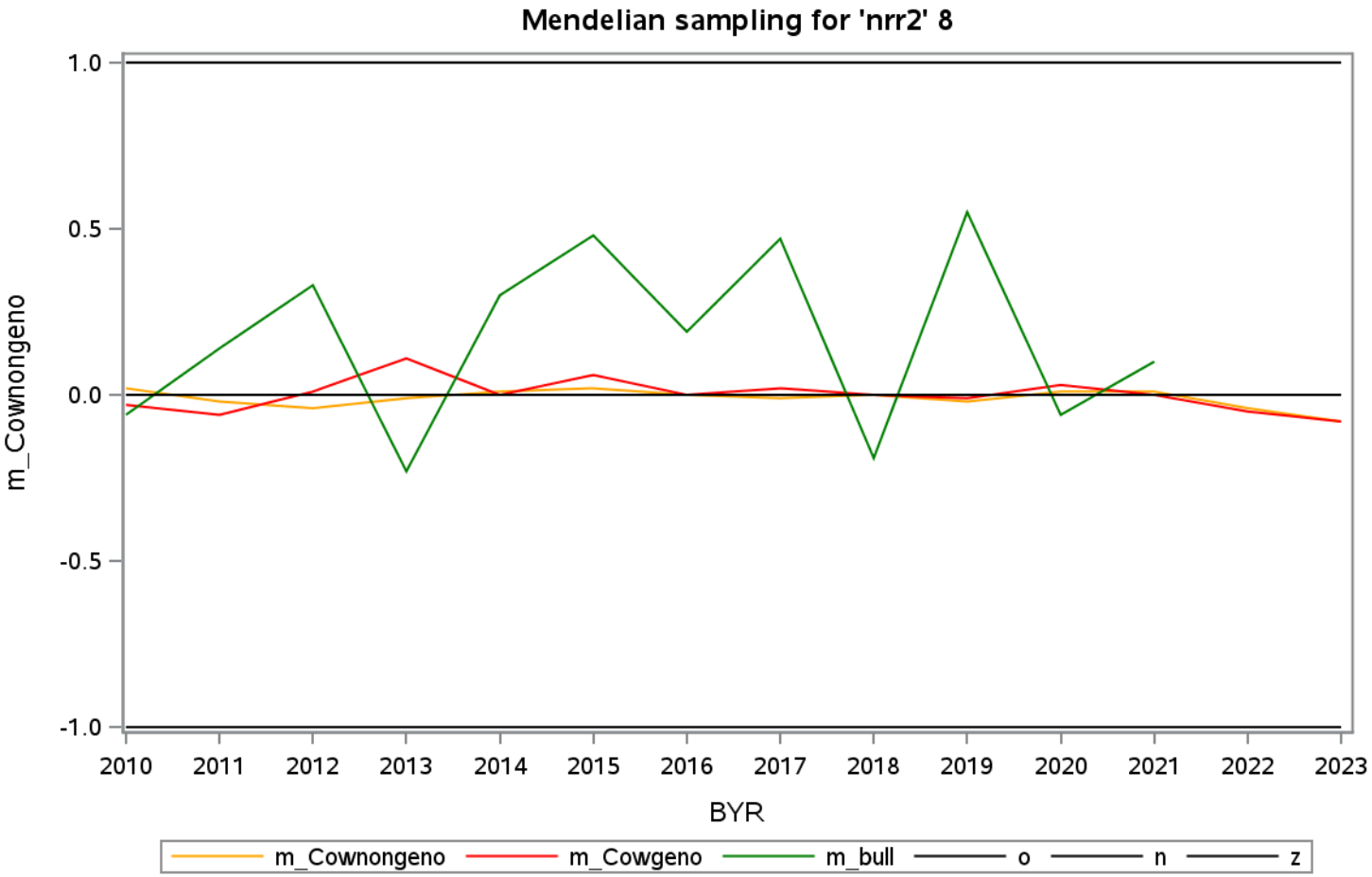
Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	0.02	0.03	-0.14	22351	2194	90
2	2011	0.03	0.05	-1.01	21784	3969	86
3	2012	0.04	0.08	0.12	21806	4369	66
4	2013	0.00	0.06	-0.53	19734	3273	62
5	2014	0.01	-0.01	-0.41	20270	3924	79
6	2015	0.00	0.02	1.20	19278	4017	57
7	2016	-0.01	0.03	0.57	17581	4377	66
8	2017	0.00	0.05	0.47	16359	5810	88
9	2018	0.02	0.02	-0.25	17237	7415	55
10	2019	-0.02	-0.02	1.28	16687	8882	57
11	2020	0.01	0.03	-0.47	18341	10628	43
12	2021	-0.04	-0.03	0.20	21829	13589	5
13	2022	-0.02	-0.05	.	19782	13036	.
14	2023	-0.01	-0.04	.	1468	1177	.



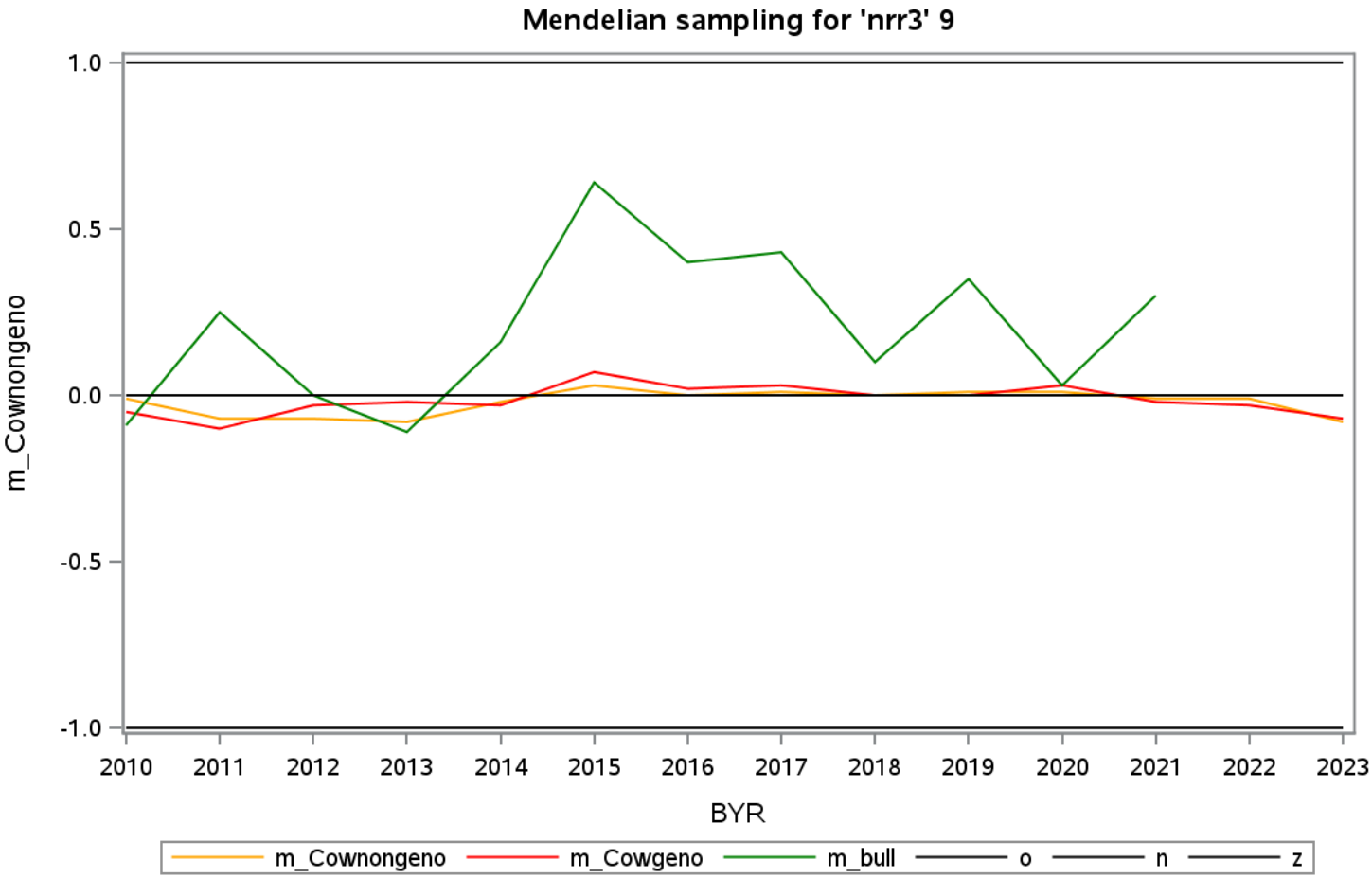
Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	0.02	0.02	-0.29	22351	2194	90
2	2011	0.09	0.06	0.09	21784	3969	86
3	2012	0.09	0.17	0.23	21806	4369	66
4	2013	0.07	0.15	-0.27	19734	3273	62
5	2014	0.08	0.07	0.23	20270	3924	79
6	2015	0.03	0.04	1.01	19278	4017	57
7	2016	-0.04	-0.04	-0.24	17581	4377	66
8	2017	-0.01	0.02	0.55	16359	5810	88
9	2018	0.01	0.03	-0.10	17237	7415	55
10	2019	0.01	0.01	0.72	16687	8882	57
11	2020	0.01	0.03	0.02	18341	10628	43
12	2021	0.02	0.03	0.00	21829	13589	5
13	2022	0.00	-0.01	.	19782	13036	.
14	2023	-0.02	0.02	.	1468	1177	.



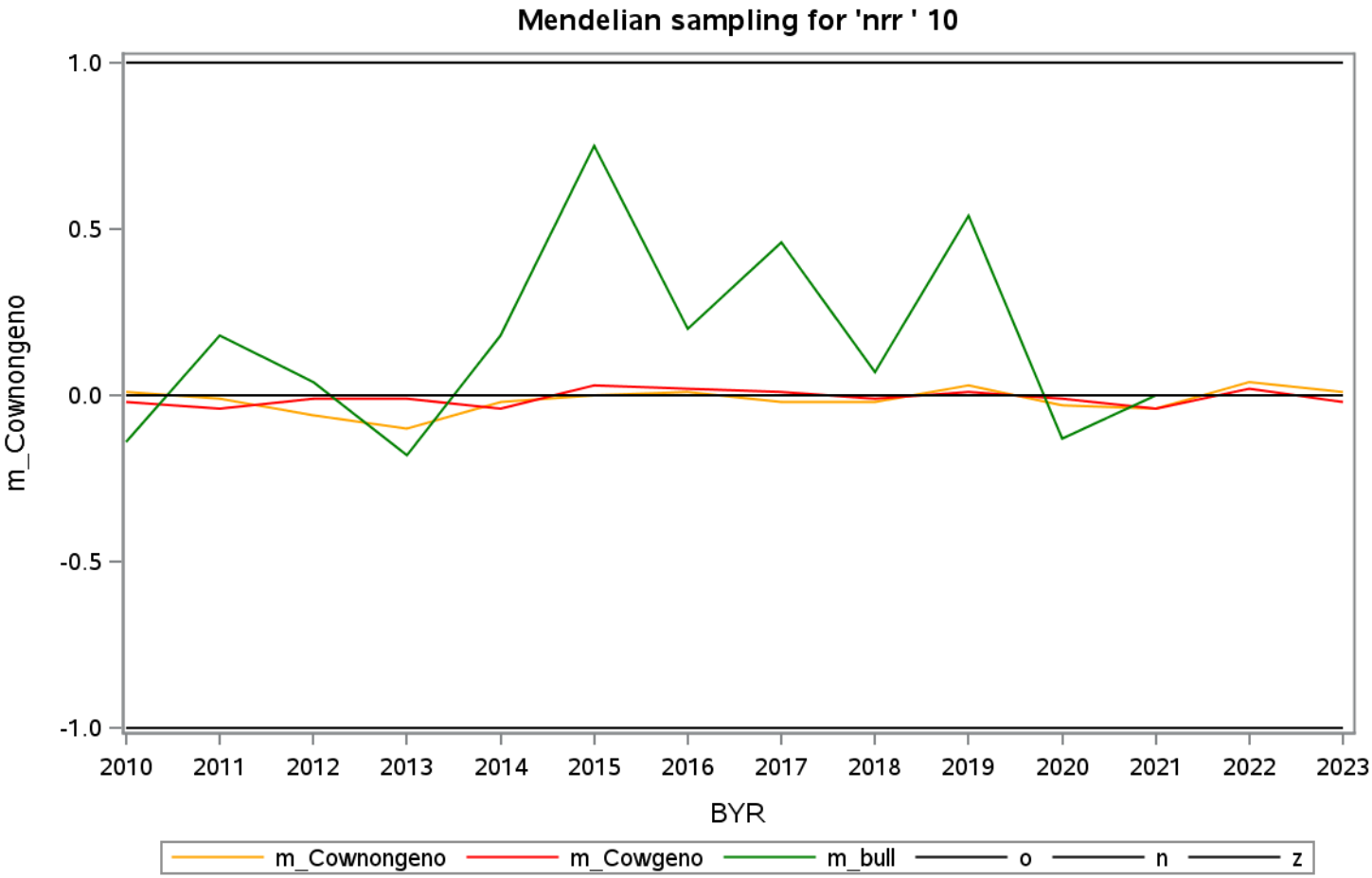
Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	0.02	-0.03	-0.06	22351	2194	90
2	2011	-0.02	-0.06	0.14	21784	3969	86
3	2012	-0.04	0.01	0.33	21806	4369	66
4	2013	-0.01	0.11	-0.23	19734	3273	62
5	2014	0.01	0.00	0.30	20270	3924	79
6	2015	0.02	0.06	0.48	19278	4017	57
7	2016	0.00	0.00	0.19	17581	4377	66
8	2017	-0.01	0.02	0.47	16359	5810	88
9	2018	0.00	0.00	-0.19	17237	7415	55
10	2019	-0.02	-0.01	0.55	16687	8882	57
11	2020	0.01	0.03	-0.06	18341	10628	43
12	2021	0.01	0.00	0.10	21829	13589	5
13	2022	-0.04	-0.05	.	19782	13036	.
14	2023	-0.08	-0.08	.	1468	1177	.



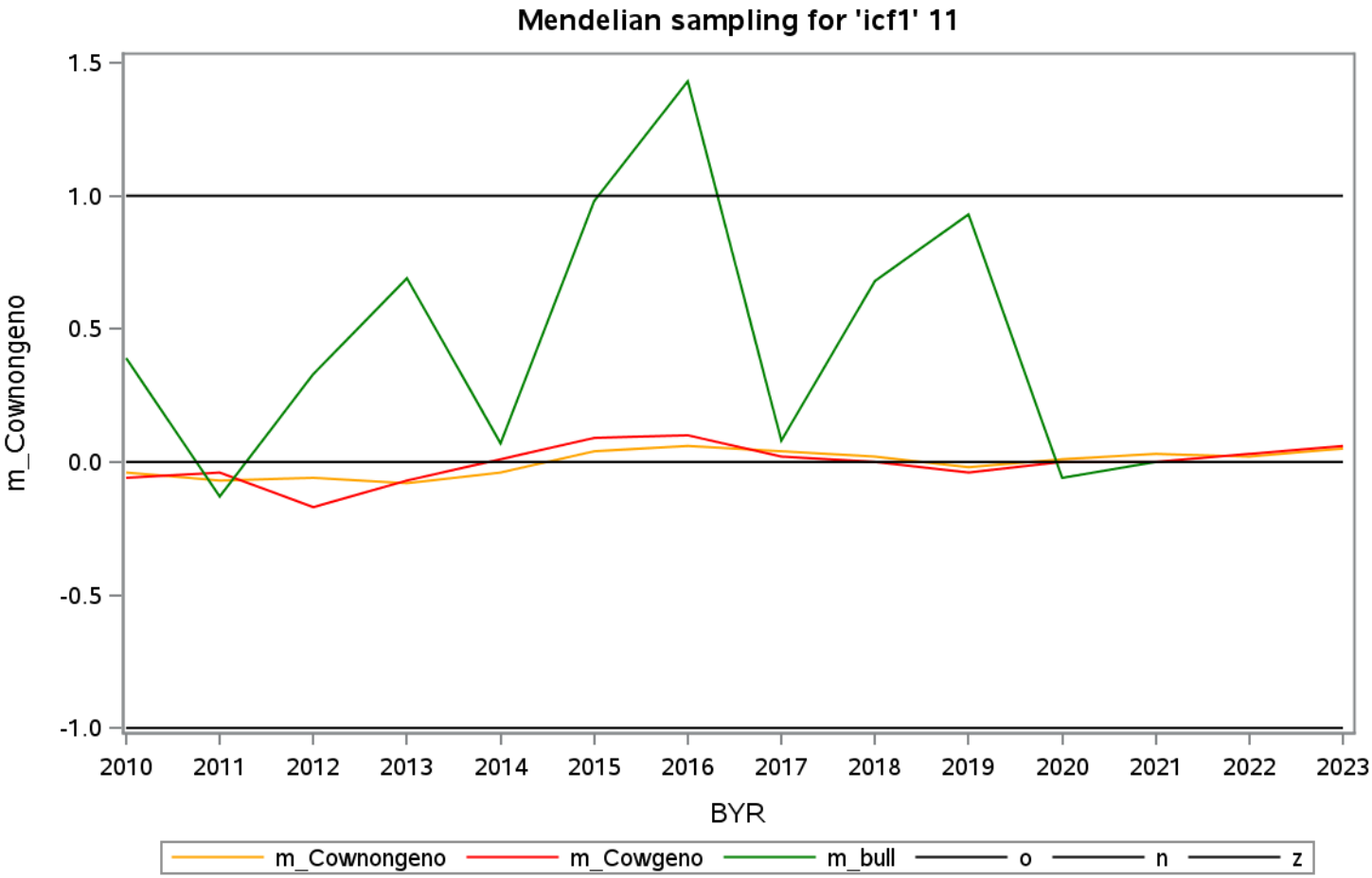
Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	-0.01	-0.05	-0.09	22351	2194	90
2	2011	-0.07	-0.10	0.25	21784	3969	86
3	2012	-0.07	-0.03	0.00	21806	4369	66
4	2013	-0.08	-0.02	-0.11	19734	3273	62
5	2014	-0.02	-0.03	0.16	20270	3924	79
6	2015	0.03	0.07	0.64	19278	4017	57
7	2016	0.00	0.02	0.40	17581	4377	66
8	2017	0.01	0.03	0.43	16359	5810	88
9	2018	0.00	0.00	0.10	17237	7415	55
10	2019	0.01	0.00	0.35	16687	8882	57
11	2020	0.01	0.03	0.03	18341	10628	43
12	2021	-0.01	-0.02	0.30	21829	13589	5
13	2022	-0.01	-0.03	.	19782	13036	.
14	2023	-0.08	-0.07	.	1468	1177	.



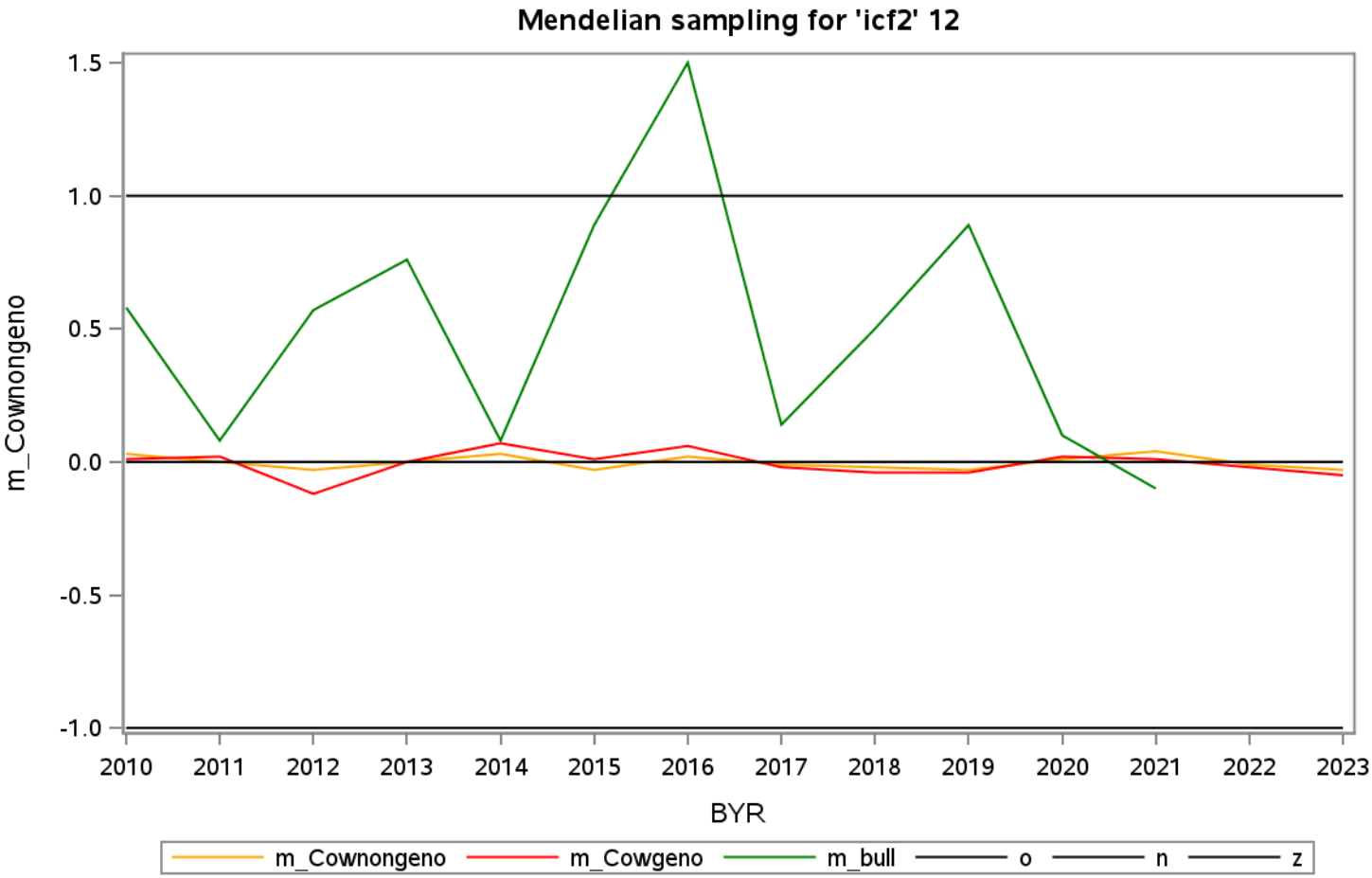
Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	0.01	-0.02	-0.14	22351	2194	90
2	2011	-0.01	-0.04	0.18	21784	3969	86
3	2012	-0.06	-0.01	0.04	21806	4369	66
4	2013	-0.10	-0.01	-0.18	19734	3273	62
5	2014	-0.02	-0.04	0.18	20270	3924	79
6	2015	0.00	0.03	0.75	19278	4017	57
7	2016	0.01	0.02	0.20	17581	4377	66
8	2017	-0.02	0.01	0.46	16359	5810	88
9	2018	-0.02	-0.01	0.07	17237	7415	55
10	2019	0.03	0.01	0.54	16687	8882	57
11	2020	-0.03	-0.01	-0.13	18341	10628	43
12	2021	-0.04	-0.04	0.00	21829	13589	5
13	2022	0.04	0.02	.	19782	13036	.
14	2023	0.01	-0.02	.	1468	1177	.



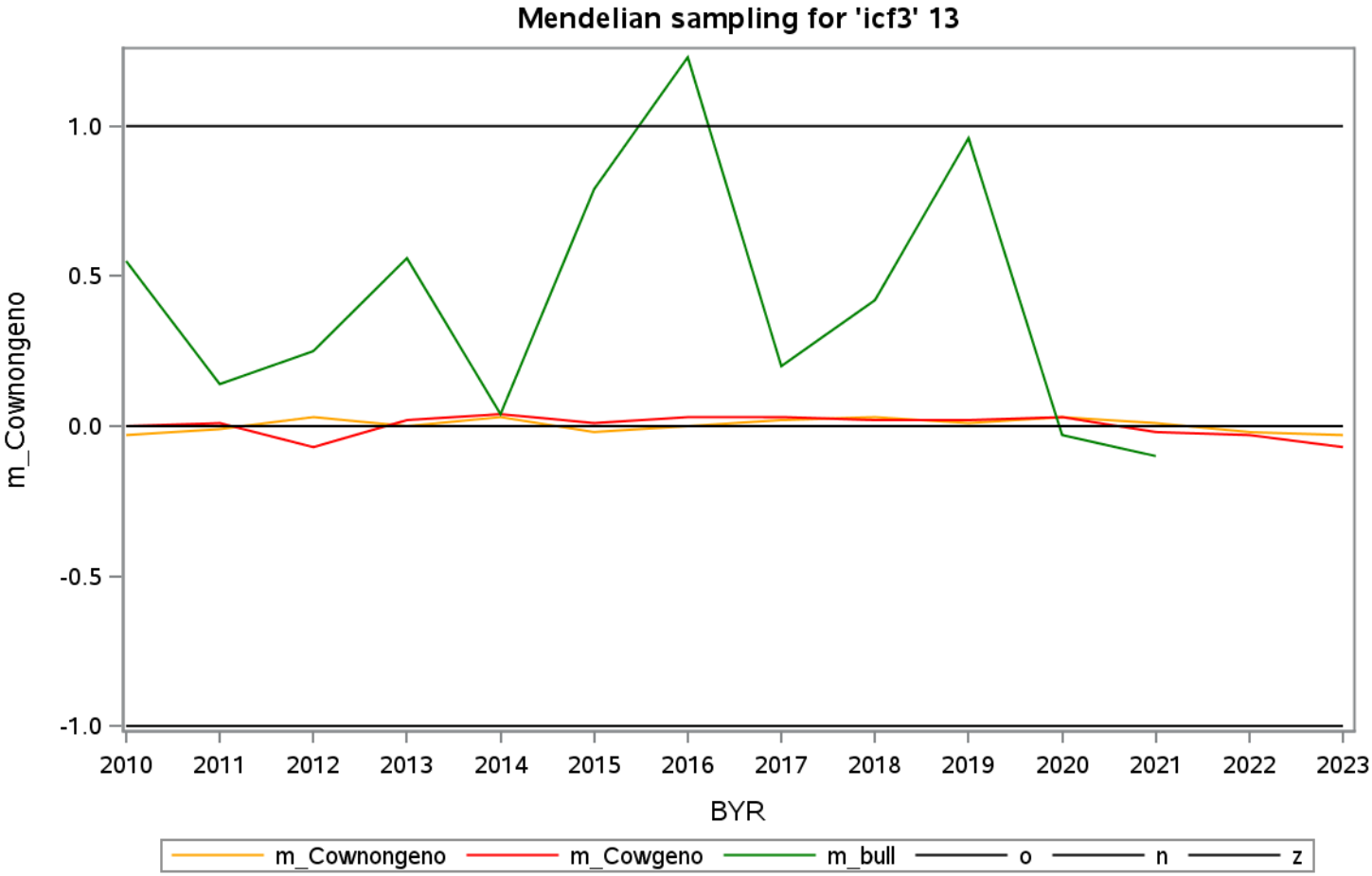
Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	-0.04	-0.06	0.39	22351	2194	90
2	2011	-0.07	-0.04	-0.13	21784	3969	86
3	2012	-0.06	-0.17	0.33	21806	4369	66
4	2013	-0.08	-0.07	0.69	19734	3273	62
5	2014	-0.04	0.01	0.07	20270	3924	79
6	2015	0.04	0.09	0.98	19278	4017	57
7	2016	0.06	0.10	1.43	17581	4377	66
8	2017	0.04	0.02	0.08	16359	5810	88
9	2018	0.02	0.00	0.68	17237	7415	55
10	2019	-0.02	-0.04	0.93	16687	8882	57
11	2020	0.01	0.00	-0.06	18341	10628	43
12	2021	0.03	0.00	0.00	21829	13589	5
13	2022	0.02	0.03	.	19782	13036	.
14	2023	0.05	0.06	.	1468	1177	.



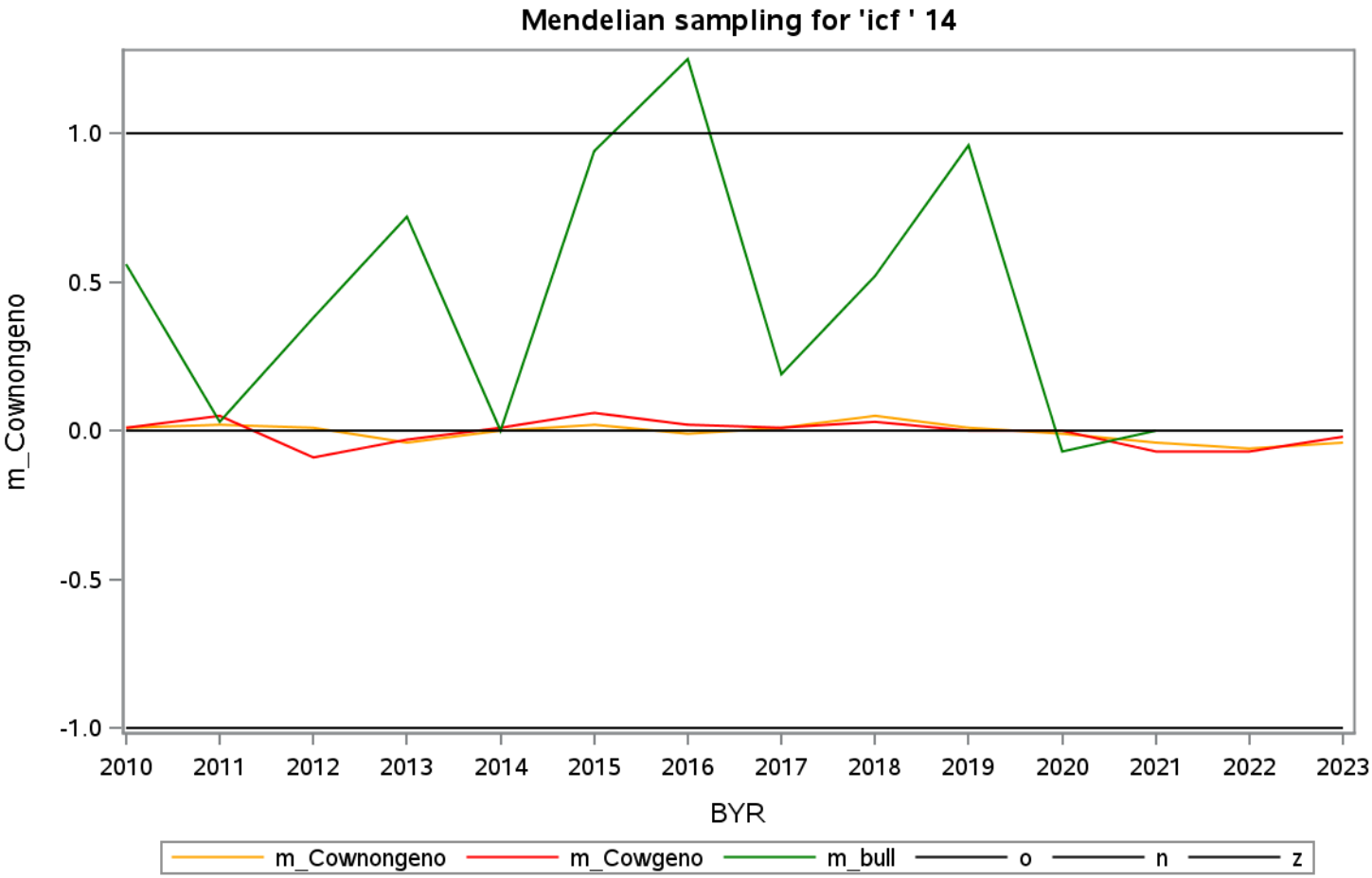
Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	0.03	0.01	0.58	22351	2194	90
2	2011	0.00	0.02	0.08	21784	3969	86
3	2012	-0.03	-0.12	0.57	21806	4369	66
4	2013	0.00	0.00	0.76	19734	3273	62
5	2014	0.03	0.07	0.08	20270	3924	79
6	2015	-0.03	0.01	0.89	19278	4017	57
7	2016	0.02	0.06	1.50	17581	4377	66
8	2017	-0.01	-0.02	0.14	16359	5810	88
9	2018	-0.02	-0.04	0.50	17237	7415	55
10	2019	-0.03	-0.04	0.89	16687	8882	57
11	2020	0.01	0.02	0.10	18341	10628	43
12	2021	0.04	0.01	-0.10	21829	13589	5
13	2022	-0.01	-0.02	.	19782	13036	.
14	2023	-0.03	-0.05	.	1468	1177	.



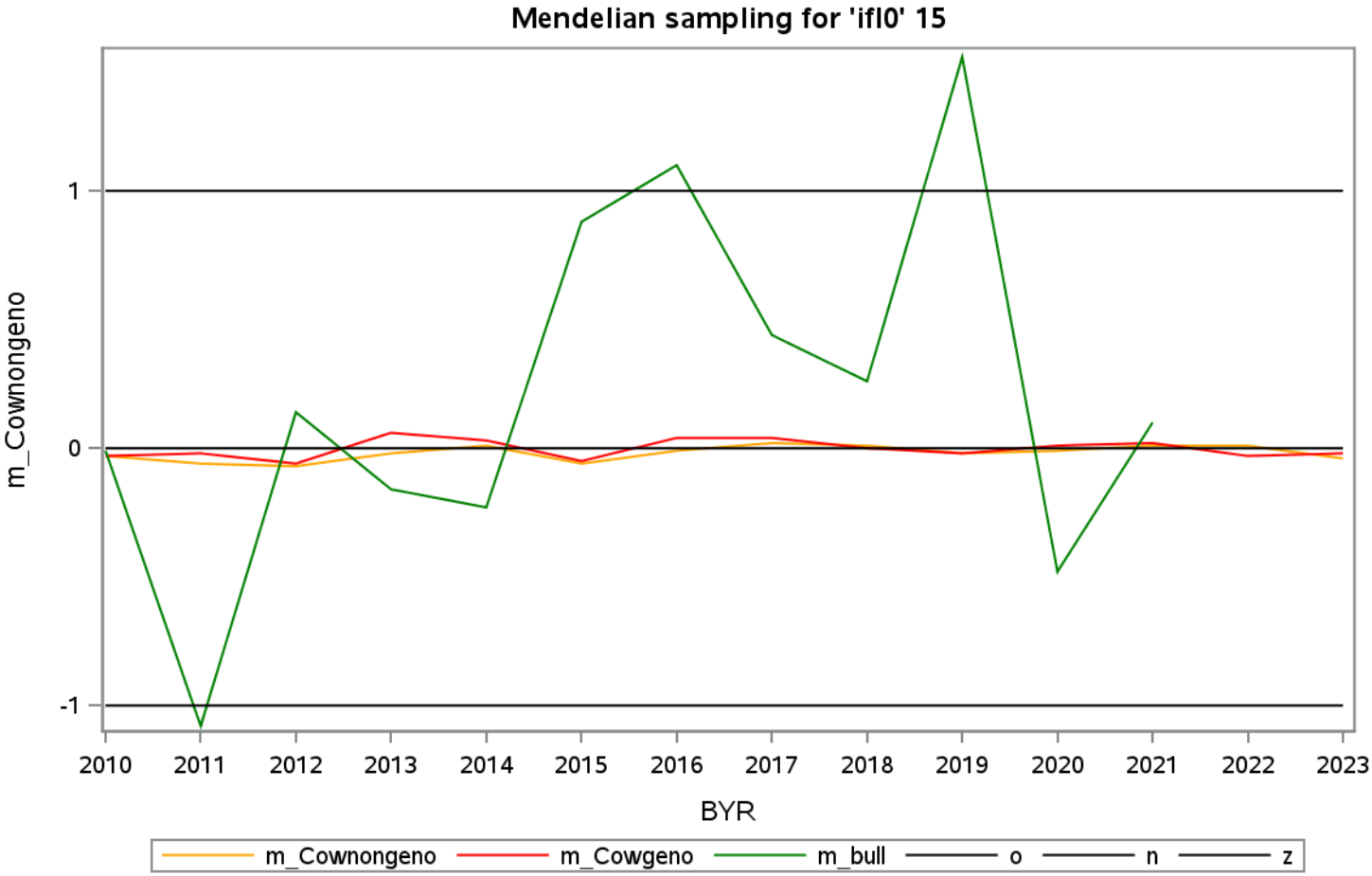
Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	-0.03	0.00	0.55	22351	2194	90
2	2011	-0.01	0.01	0.14	21784	3969	86
3	2012	0.03	-0.07	0.25	21806	4369	66
4	2013	0.00	0.02	0.56	19734	3273	62
5	2014	0.03	0.04	0.04	20270	3924	79
6	2015	-0.02	0.01	0.79	19278	4017	57
7	2016	0.00	0.03	1.23	17581	4377	66
8	2017	0.02	0.03	0.20	16359	5810	88
9	2018	0.03	0.02	0.42	17237	7415	55
10	2019	0.01	0.02	0.96	16687	8882	57
11	2020	0.03	0.03	-0.03	18341	10628	43
12	2021	0.01	-0.02	-0.10	21829	13589	5
13	2022	-0.02	-0.03	.	19782	13036	.
14	2023	-0.03	-0.07	.	1468	1177	.



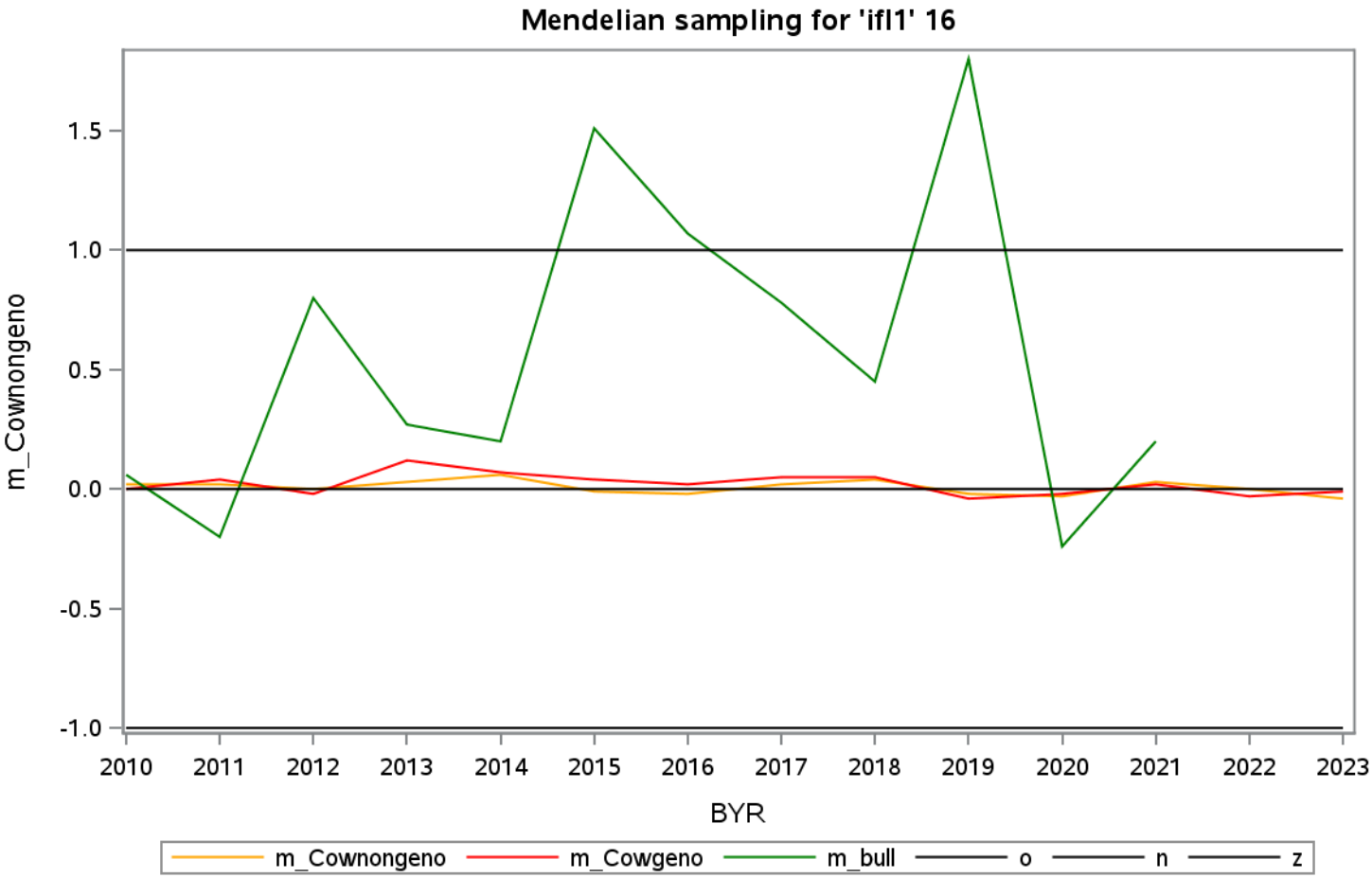
Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	0.01	0.01	0.56	22351	2194	90
2	2011	0.02	0.05	0.03	21784	3969	86
3	2012	0.01	-0.09	0.38	21806	4369	66
4	2013	-0.04	-0.03	0.72	19734	3273	62
5	2014	0.00	0.01	0.00	20270	3924	79
6	2015	0.02	0.06	0.94	19278	4017	57
7	2016	-0.01	0.02	1.25	17581	4377	66
8	2017	0.01	0.01	0.19	16359	5810	88
9	2018	0.05	0.03	0.52	17237	7415	55
10	2019	0.01	0.00	0.96	16687	8882	57
11	2020	-0.01	0.00	-0.07	18341	10628	43
12	2021	-0.04	-0.07	0.00	21829	13589	5
13	2022	-0.06	-0.07	.	19782	13036	.
14	2023	-0.04	-0.02	.	1468	1177	.



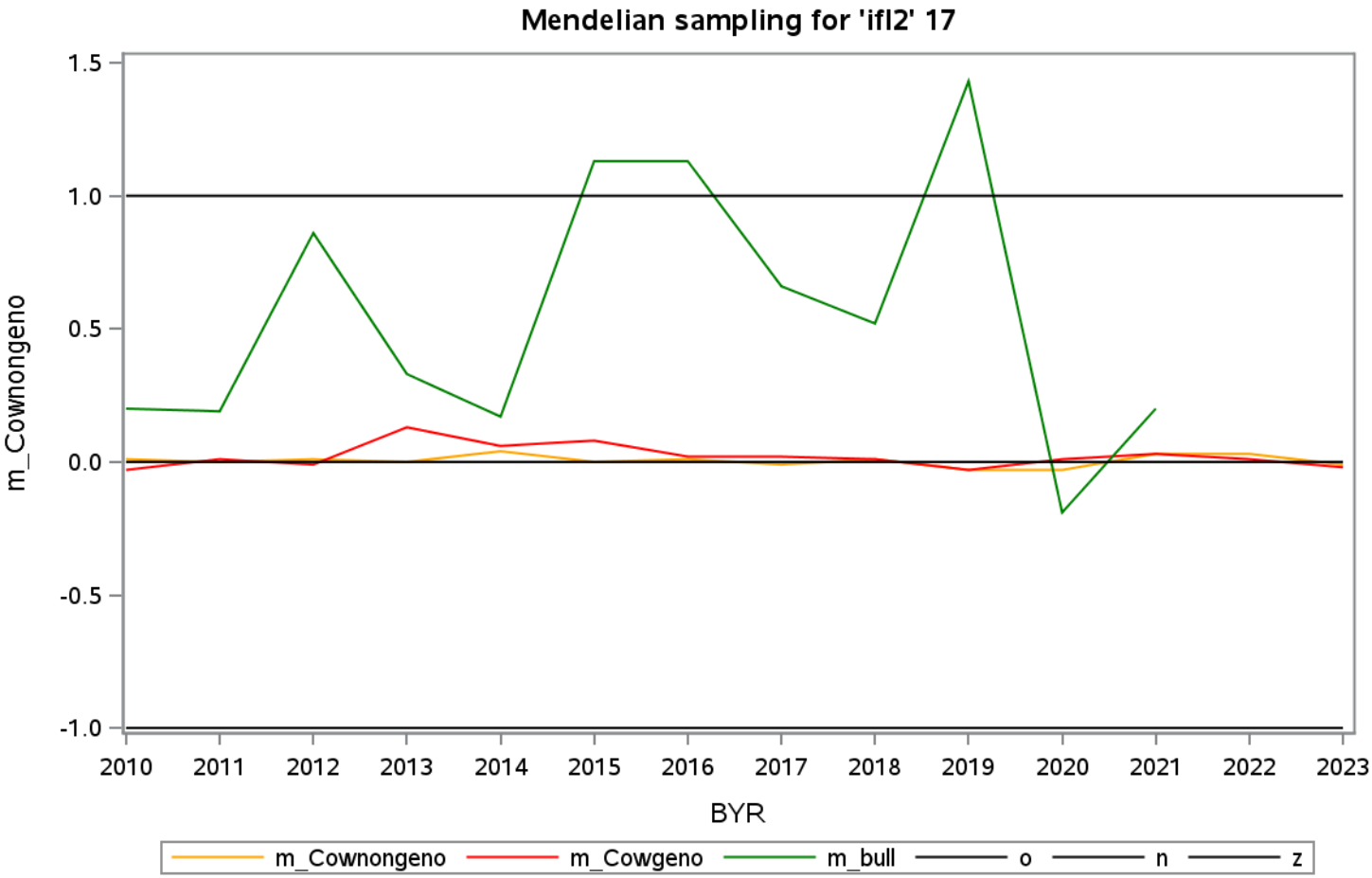
Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	-0.03	-0.03	-0.01	22351	2194	90
2	2011	-0.06	-0.02	-1.08	21784	3969	86
3	2012	-0.07	-0.06	0.14	21806	4369	66
4	2013	-0.02	0.06	-0.16	19734	3273	62
5	2014	0.01	0.03	-0.23	20270	3924	79
6	2015	-0.06	-0.05	0.88	19278	4017	57
7	2016	-0.01	0.04	1.10	17581	4377	66
8	2017	0.02	0.04	0.44	16359	5810	88
9	2018	0.01	0.00	0.26	17237	7415	55
10	2019	-0.02	-0.02	1.52	16687	8882	57
11	2020	-0.01	0.01	-0.48	18341	10628	43
12	2021	0.01	0.02	0.10	21829	13589	5
13	2022	0.01	-0.03	.	19782	13036	.
14	2023	-0.04	-0.02	.	1468	1177	.



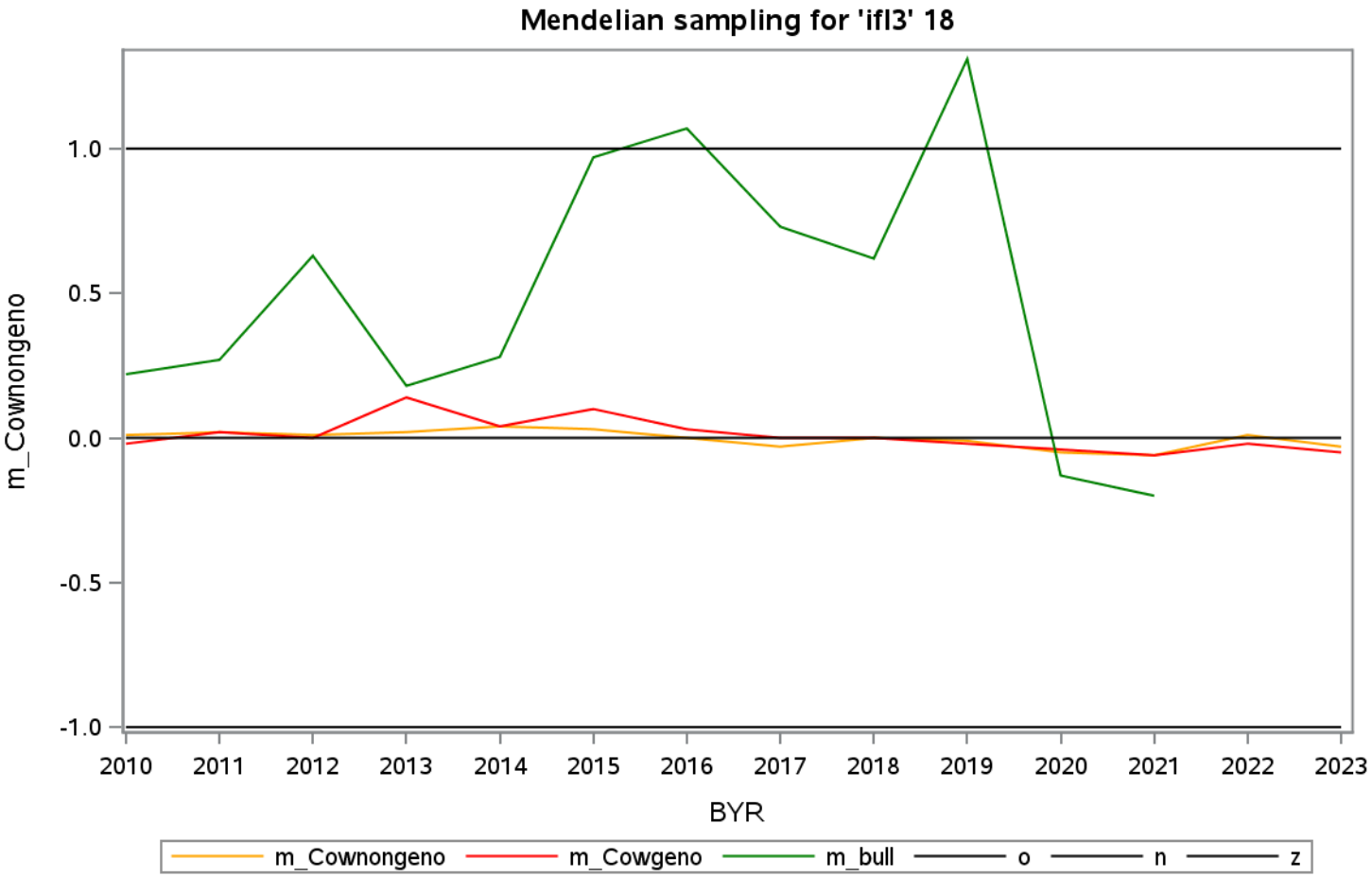
Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	0.02	0.00	0.06	22351	2194	90
2	2011	0.02	0.04	-0.20	21784	3969	86
3	2012	0.00	-0.02	0.80	21806	4369	66
4	2013	0.03	0.12	0.27	19734	3273	62
5	2014	0.06	0.07	0.20	20270	3924	79
6	2015	-0.01	0.04	1.51	19278	4017	57
7	2016	-0.02	0.02	1.07	17581	4377	66
8	2017	0.02	0.05	0.78	16359	5810	88
9	2018	0.04	0.05	0.45	17237	7415	55
10	2019	-0.02	-0.04	1.80	16687	8882	57
11	2020	-0.03	-0.02	-0.24	18341	10628	43
12	2021	0.03	0.02	0.20	21829	13589	5
13	2022	0.00	-0.03	.	19782	13036	.
14	2023	-0.04	-0.01	.	1468	1177	.



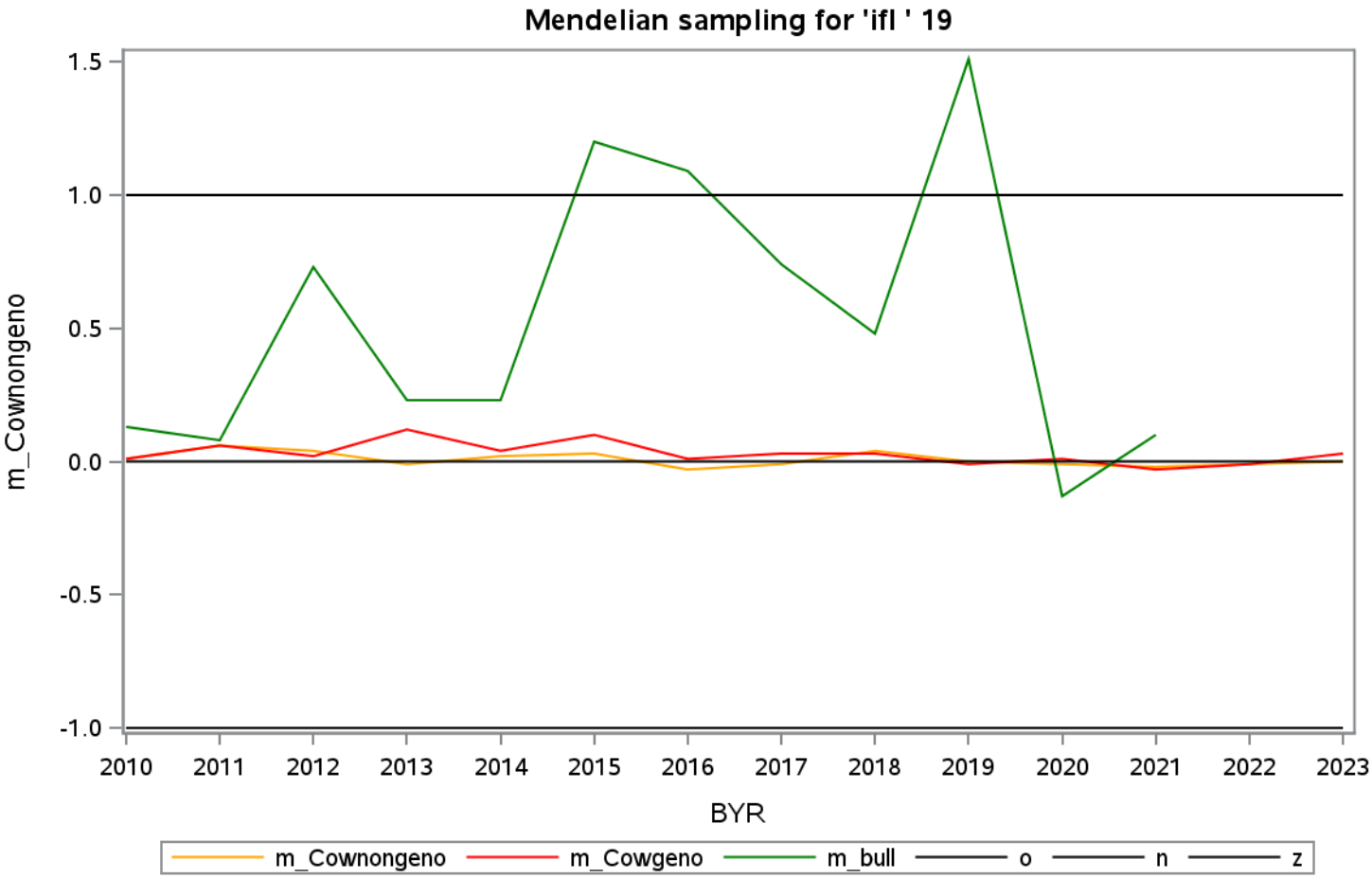
Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	0.01	-0.03	0.20	22351	2194	90
2	2011	0.00	0.01	0.19	21784	3969	86
3	2012	0.01	-0.01	0.86	21806	4369	66
4	2013	0.00	0.13	0.33	19734	3273	62
5	2014	0.04	0.06	0.17	20270	3924	79
6	2015	0.00	0.08	1.13	19278	4017	57
7	2016	0.01	0.02	1.13	17581	4377	66
8	2017	-0.01	0.02	0.66	16359	5810	88
9	2018	0.01	0.01	0.52	17237	7415	55
10	2019	-0.03	-0.03	1.43	16687	8882	57
11	2020	-0.03	0.01	-0.19	18341	10628	43
12	2021	0.03	0.03	0.20	21829	13589	5
13	2022	0.03	0.01	.	19782	13036	.
14	2023	-0.01	-0.02	.	1468	1177	.



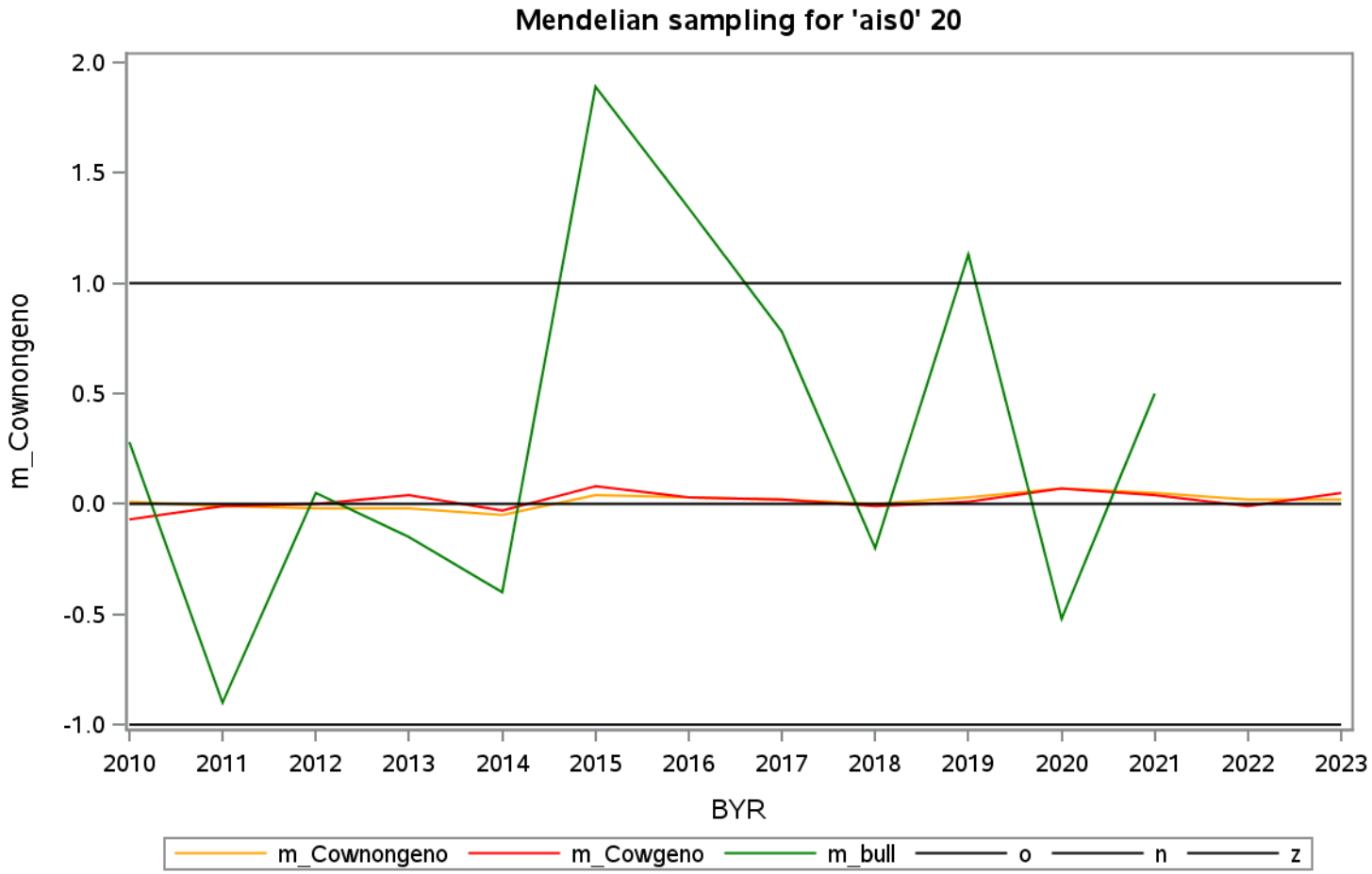
Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	0.01	-0.02	0.22	22351	2194	90
2	2011	0.02	0.02	0.27	21784	3969	86
3	2012	0.01	0.00	0.63	21806	4369	66
4	2013	0.02	0.14	0.18	19734	3273	62
5	2014	0.04	0.04	0.28	20270	3924	79
6	2015	0.03	0.10	0.97	19278	4017	57
7	2016	0.00	0.03	1.07	17581	4377	66
8	2017	-0.03	0.00	0.73	16359	5810	88
9	2018	0.00	0.00	0.62	17237	7415	55
10	2019	-0.01	-0.02	1.31	16687	8882	57
11	2020	-0.05	-0.04	-0.13	18341	10628	43
12	2021	-0.06	-0.06	-0.20	21829	13589	5
13	2022	0.01	-0.02	.	19782	13036	.
14	2023	-0.03	-0.05	.	1468	1177	.



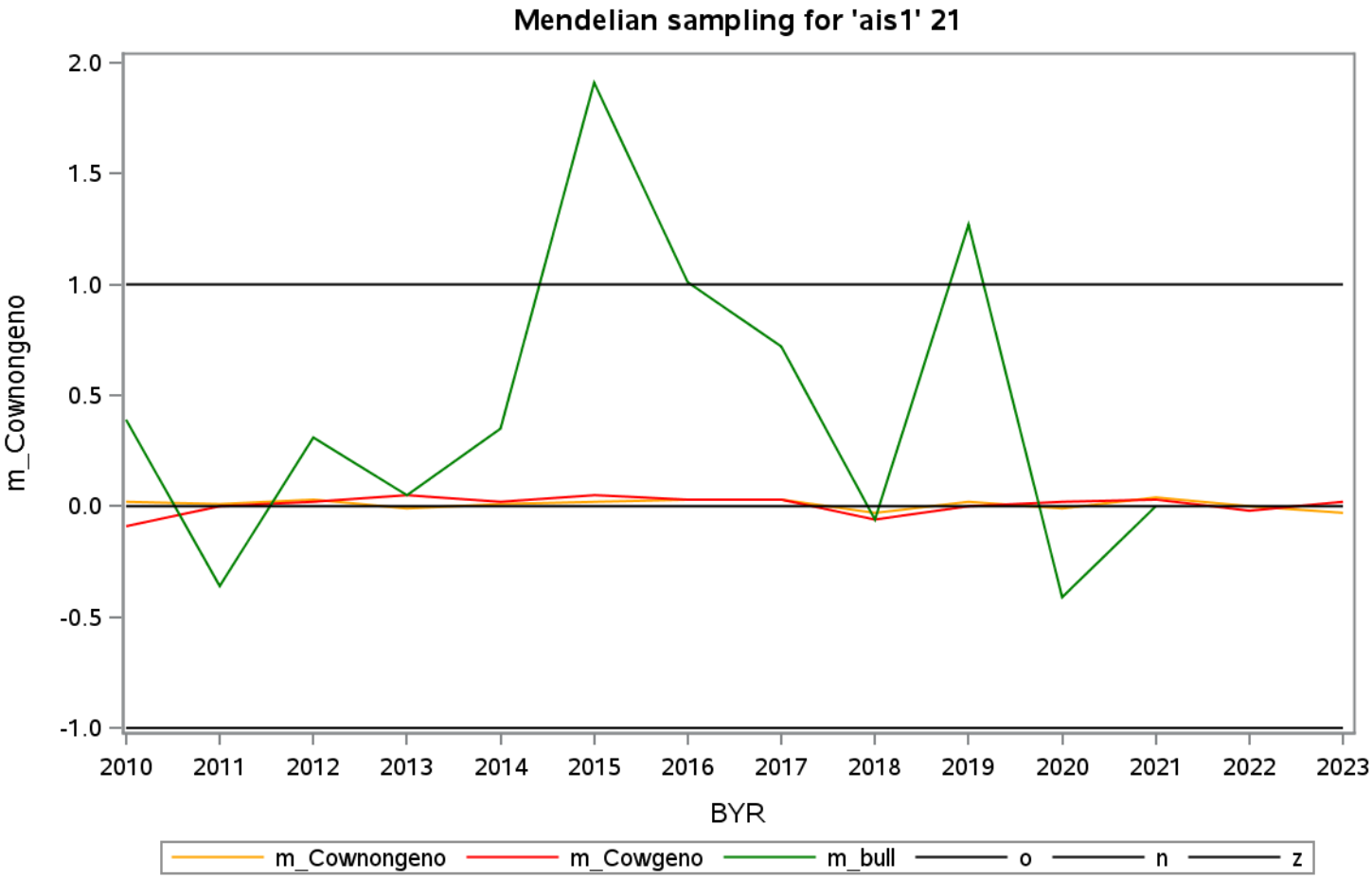
Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	0.01	0.01	0.13	22351	2194	90
2	2011	0.06	0.06	0.08	21784	3969	86
3	2012	0.04	0.02	0.73	21806	4369	66
4	2013	-0.01	0.12	0.23	19734	3273	62
5	2014	0.02	0.04	0.23	20270	3924	79
6	2015	0.03	0.10	1.20	19278	4017	57
7	2016	-0.03	0.01	1.09	17581	4377	66
8	2017	-0.01	0.03	0.74	16359	5810	88
9	2018	0.04	0.03	0.48	17237	7415	55
10	2019	0.00	-0.01	1.51	16687	8882	57
11	2020	-0.01	0.01	-0.13	18341	10628	43
12	2021	-0.02	-0.03	0.10	21829	13589	5
13	2022	-0.01	-0.01	.	19782	13036	.
14	2023	0.00	0.03	.	1468	1177	.



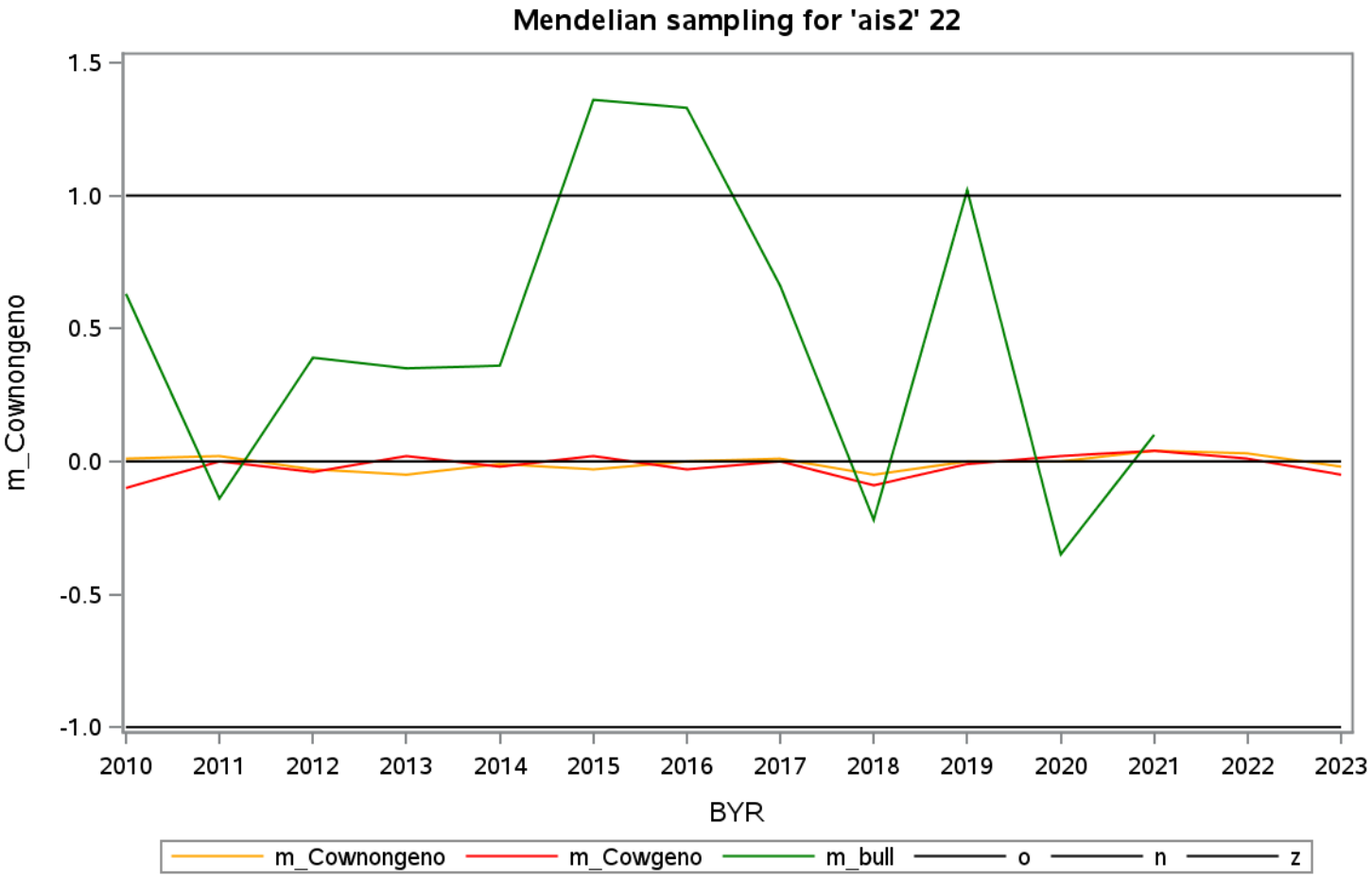
Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	0.01	-0.07	0.28	22351	2194	90
2	2011	-0.01	-0.01	-0.90	21784	3969	86
3	2012	-0.02	0.00	0.05	21806	4369	66
4	2013	-0.02	0.04	-0.15	19734	3273	62
5	2014	-0.05	-0.03	-0.40	20270	3924	79
6	2015	0.04	0.08	1.89	19278	4017	57
7	2016	0.03	0.03	1.34	17581	4377	66
8	2017	0.02	0.02	0.78	16359	5810	88
9	2018	0.00	-0.01	-0.20	17237	7415	55
10	2019	0.03	0.01	1.13	16687	8882	57
11	2020	0.07	0.07	-0.52	18341	10628	43
12	2021	0.05	0.04	0.50	21829	13589	5
13	2022	0.02	-0.01	.	19782	13036	.
14	2023	0.02	0.05	.	1468	1177	.



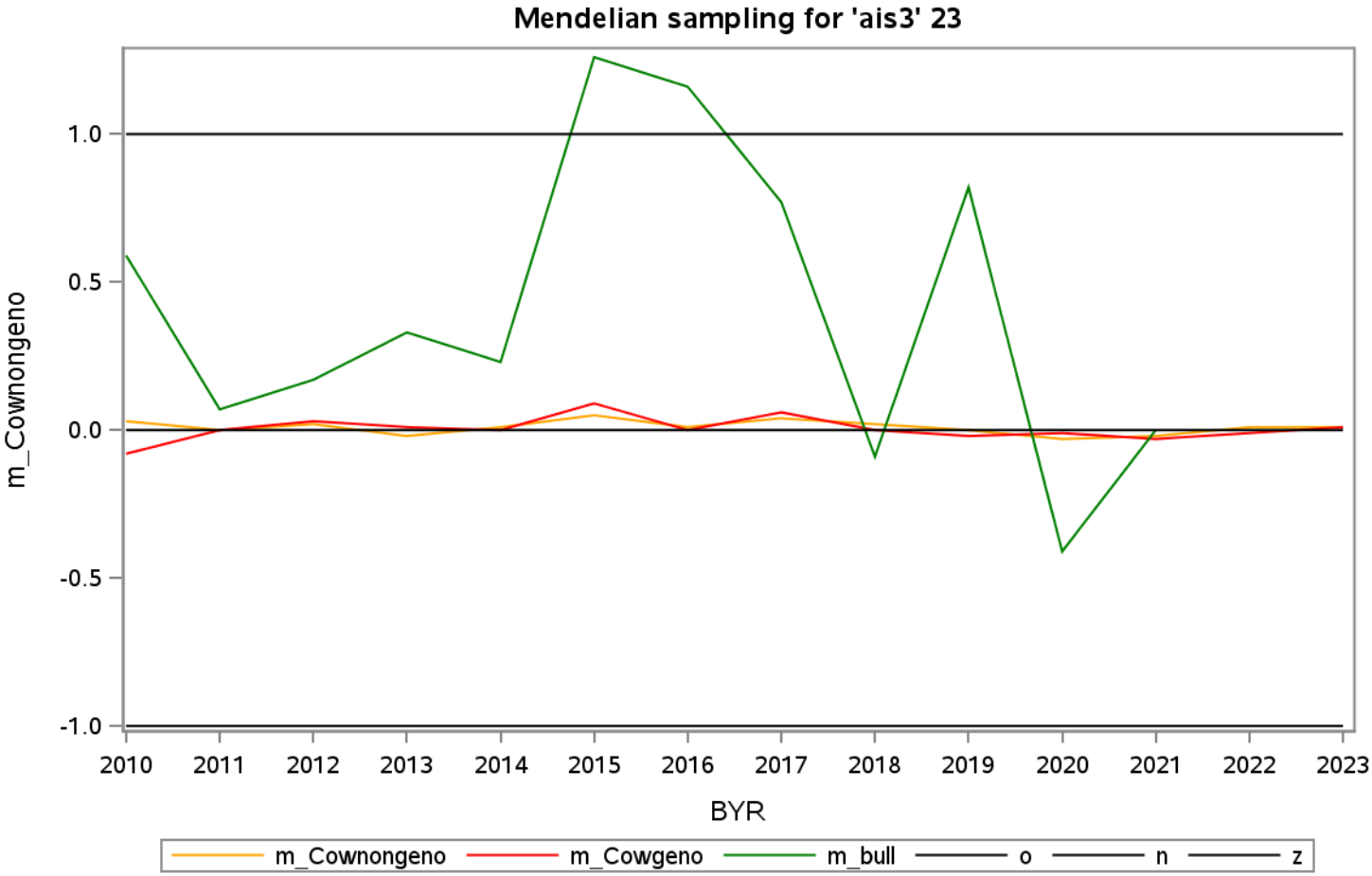
Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	0.02	-0.09	0.39	22351	2194	90
2	2011	0.01	0.00	-0.36	21784	3969	86
3	2012	0.03	0.02	0.31	21806	4369	66
4	2013	-0.01	0.05	0.05	19734	3273	62
5	2014	0.01	0.02	0.35	20270	3924	79
6	2015	0.02	0.05	1.91	19278	4017	57
7	2016	0.03	0.03	1.01	17581	4377	66
8	2017	0.03	0.03	0.72	16359	5810	88
9	2018	-0.03	-0.06	-0.06	17237	7415	55
10	2019	0.02	0.00	1.27	16687	8882	57
11	2020	-0.01	0.02	-0.41	18341	10628	43
12	2021	0.04	0.03	0.00	21829	13589	5
13	2022	0.00	-0.02	.	19782	13036	.
14	2023	-0.03	0.02	.	1468	1177	.



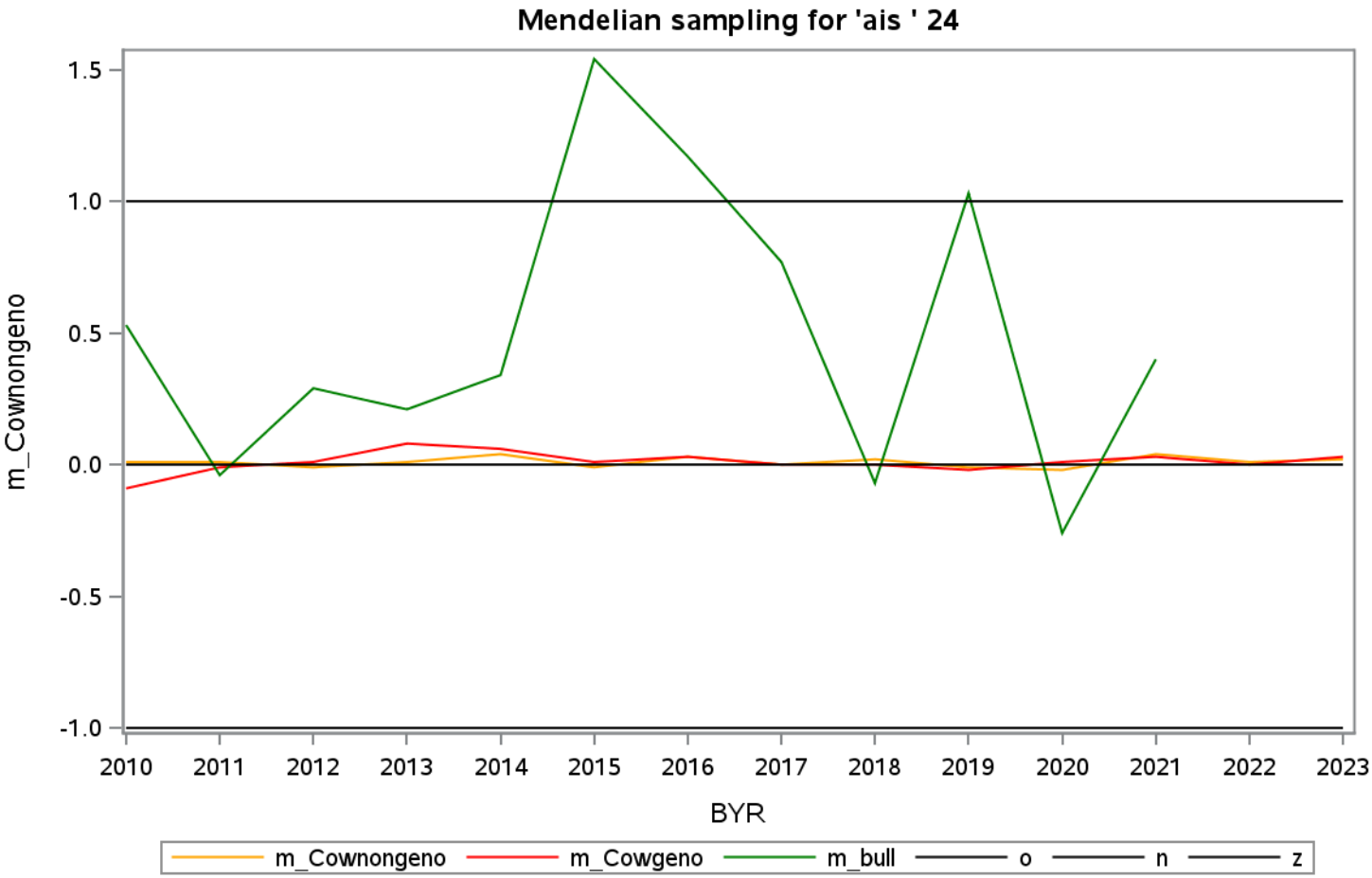
Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	0.01	-0.10	0.63	22351	2194	90
2	2011	0.02	0.00	-0.14	21784	3969	86
3	2012	-0.03	-0.04	0.39	21806	4369	66
4	2013	-0.05	0.02	0.35	19734	3273	62
5	2014	-0.01	-0.02	0.36	20270	3924	79
6	2015	-0.03	0.02	1.36	19278	4017	57
7	2016	0.00	-0.03	1.33	17581	4377	66
8	2017	0.01	0.00	0.66	16359	5810	88
9	2018	-0.05	-0.09	-0.22	17237	7415	55
10	2019	0.00	-0.01	1.02	16687	8882	57
11	2020	0.00	0.02	-0.35	18341	10628	43
12	2021	0.04	0.04	0.10	21829	13589	5
13	2022	0.03	0.01	.	19782	13036	.
14	2023	-0.02	-0.05	.	1468	1177	.



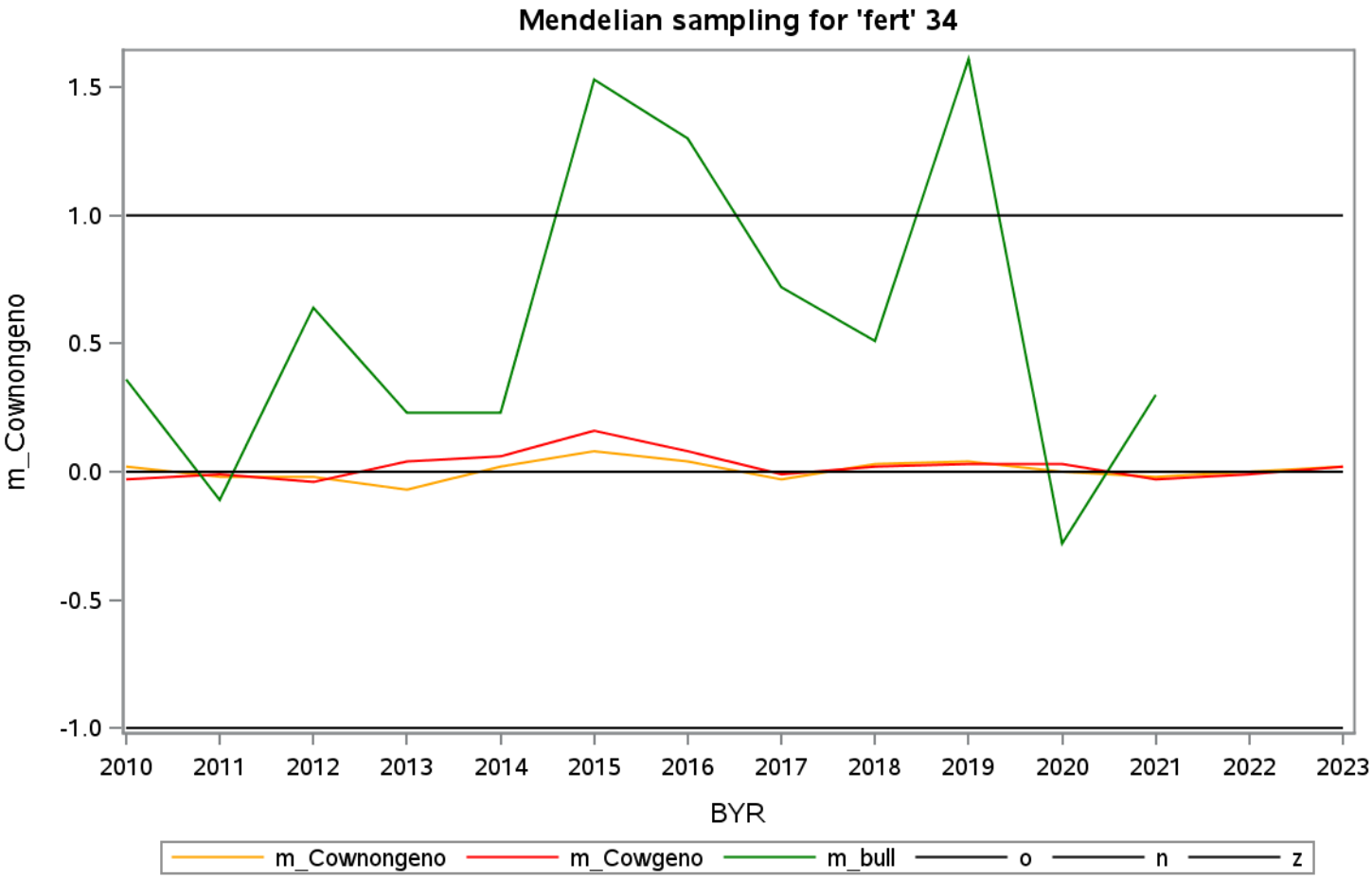
Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	0.03	-0.08	0.59	22351	2194	90
2	2011	0.00	0.00	0.07	21784	3969	86
3	2012	0.02	0.03	0.17	21806	4369	66
4	2013	-0.02	0.01	0.33	19734	3273	62
5	2014	0.01	0.00	0.23	20270	3924	79
6	2015	0.05	0.09	1.26	19278	4017	57
7	2016	0.01	0.00	1.16	17581	4377	66
8	2017	0.04	0.06	0.77	16359	5810	88
9	2018	0.02	0.00	-0.09	17237	7415	55
10	2019	0.00	-0.02	0.82	16687	8882	57
11	2020	-0.03	-0.01	-0.41	18341	10628	43
12	2021	-0.02	-0.03	0.00	21829	13589	5
13	2022	0.01	-0.01	.	19782	13036	.
14	2023	0.01	0.01	.	1468	1177	.



Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	0.01	-0.09	0.53	22351	2194	90
2	2011	0.01	-0.01	-0.04	21784	3969	86
3	2012	-0.01	0.01	0.29	21806	4369	66
4	2013	0.01	0.08	0.21	19734	3273	62
5	2014	0.04	0.06	0.34	20270	3924	79
6	2015	-0.01	0.01	1.54	19278	4017	57
7	2016	0.03	0.03	1.17	17581	4377	66
8	2017	0.00	0.00	0.77	16359	5810	88
9	2018	0.02	0.00	-0.07	17237	7415	55
10	2019	-0.01	-0.02	1.03	16687	8882	57
11	2020	-0.02	0.01	-0.26	18341	10628	43
12	2021	0.04	0.03	0.40	21829	13589	5
13	2022	0.01	0.00	.	19782	13036	.
14	2023	0.02	0.03	.	1468	1177	.



Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	0.02	-0.03	0.36	22351	2194	90
2	2011	-0.02	-0.01	-0.11	21784	3969	86
3	2012	-0.02	-0.04	0.64	21806	4369	66
4	2013	-0.07	0.04	0.23	19734	3273	62
5	2014	0.02	0.06	0.23	20270	3924	79
6	2015	0.08	0.16	1.53	19278	4017	57
7	2016	0.04	0.08	1.30	17581	4377	66
8	2017	-0.03	-0.01	0.72	16359	5810	88
9	2018	0.03	0.02	0.51	17237	7415	55
10	2019	0.04	0.03	1.61	16687	8882	57
11	2020	0.00	0.03	-0.28	18341	10628	43
12	2021	-0.02	-0.03	0.30	21829	13589	5
13	2022	0.00	-0.01	.	19782	13036	.
14	2023	0.02	0.02	.	1468	1177	.



JER reliability for SS and traditional 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	cr0	20260	30.4	31.1	4.5	4.5	-0.8	4.1	0.58
2	2011	cr0	19627	30.8	31.3	4.1	4.3	-0.5	4.3	0.48
3	2012	cr0	20141	31.2	31.2	4.5	4.7	0.0	4.9	0.44
4	2013	cr0	18263	31.8	31.0	5.1	4.8	0.8	5.4	0.40
5	2014	cr0	18525	32.1	30.9	5.3	4.7	1.3	5.6	0.37
6	2015	cr0	17269	32.6	31.0	5.6	4.8	1.6	5.9	0.36
7	2016	cr0	16093	32.8	31.1	5.4	4.3	1.7	5.7	0.34
8	2017	cr0	15145	32.3	31.0	4.8	4.0	1.3	5.0	0.36
9	2018	cr0	16279	31.9	31.5	4.4	3.7	0.5	4.8	0.32
10	2019	cr0	16390	31.2	31.0	3.9	3.9	0.2	4.5	0.35
11	2020	cr0	18470	30.4	30.7	3.2	4.2	-0.4	4.0	0.43
12	2021	cr0	22858	29.8	29.9	2.7	4.2	-0.1	3.7	0.50
13	2022	cr0	14183	29.4	27.8	2.5	4.4	1.6	3.8	0.52
14	2023	cr0	1	.	.	.	.	.	.	.
15	2010	cr	22942	34.0	33.8	5.7	4.2	0.2	4.7	0.60
16	2011	cr	22226	34.3	34.0	5.6	4.0	0.4	4.8	0.55
17	2012	cr	22326	34.6	33.9	5.9	4.3	0.7	5.2	0.51
18	2013	cr	20261	35.2	33.7	6.4	4.4	1.5	5.7	0.49
19	2014	cr	20707	35.5	33.7	6.5	4.3	1.8	5.8	0.49
20	2015	cr	19776	35.8	33.6	6.6	4.4	2.2	6.0	0.46
21	2016	cr	18022	36.0	33.7	6.4	4.3	2.2	5.9	0.45
22	2017	cr	17042	35.1	33.6	5.8	4.1	1.6	5.3	0.47
23	2018	cr	18050	34.7	33.9	5.5	3.8	0.9	5.1	0.45
24	2019	cr	17738	33.4	33.1	4.8	4.0	0.3	4.8	0.42
25	2020	cr	19440	31.5	32.2	3.6	4.2	-0.7	4.1	0.45
26	2021	cr	23231	30.3	29.8	3.0	4.4	0.4	3.9	0.51
27	2022	cr	14183	29.8	25.6	2.8	4.5	4.3	4.1	0.46
28	2023	cr	1	.	.	.	.	.	.	.
29	2010	nrr0	19604	27.9	30.2	4.4	4.8	-2.3	3.3	0.74
30	2011	nrr0	19142	28.4	30.3	3.9	4.7	-1.8	3.6	0.67
31	2012	nrr0	19495	28.8	30.3	4.2	5.0	-1.5	4.0	0.62
32	2013	nrr0	17759	29.3	30.0	4.7	5.0	-0.7	4.6	0.57
33	2014	nrr0	18035	29.6	29.9	4.8	5.0	-0.3	4.8	0.52
34	2015	nrr0	16781	30.1	30.0	5.1	5.1	0.1	5.0	0.51
35	2016	nrr0	15628	30.3	30.1	4.9	4.5	0.3	4.8	0.48
36	2017	nrr0	14738	30.0	30.1	4.3	4.2	0.0	4.2	0.50
37	2018	nrr0	15857	30.0	30.7	3.8	3.9	-0.7	4.0	0.47

JER reliability for SS and traditional for nongenotyped females with phenotype

Obs	BYR	name	no	mean_ss	mean_e	std_ss	std_e	mean_dif	std_dif	corr_SS
38	2019	nrr0	16011	29.5	30.4	3.5	4.0	-0.9	3.7	0.54
39	2020	nrr0	18049	29.2	30.5	3.1	4.2	-1.3	3.3	0.64
40	2021	nrr0	22186	29.1	30.3	2.7	4.1	-1.3	3.0	0.69
41	2022	nrr0	19228	28.9	29.1	2.6	4.4	-0.2	3.2	0.70
42	2023	nrr0	162	29.6	25.9	2.3	4.7	3.7	4.5	0.35
43	2010	nrr	22630	28.4	32.1	4.4	4.4	-3.8	3.2	0.74
44	2011	nrr	22000	28.9	32.3	3.9	4.3	-3.4	3.4	0.67
45	2012	nrr	22076	29.2	32.2	4.2	4.5	-3.0	3.8	0.61
46	2013	nrr	20082	29.7	32.0	4.7	4.7	-2.3	4.3	0.57
47	2014	nrr	20483	30.0	31.9	4.8	4.6	-1.9	4.5	0.54
48	2015	nrr	19538	30.2	31.9	5.0	4.8	-1.6	4.7	0.54
49	2016	nrr	17839	30.4	32.0	4.8	4.5	-1.5	4.6	0.52
50	2017	nrr	16835	30.0	31.9	4.3	4.3	-1.8	4.0	0.55
51	2018	nrr	17892	29.9	32.3	3.8	4.0	-2.4	3.8	0.52
52	2019	nrr	17591	29.5	31.7	3.5	4.2	-2.2	3.5	0.59
53	2020	nrr	19330	29.1	31.1	3.0	4.3	-2.0	3.2	0.68
54	2021	nrr	22918	29.0	29.2	2.8	4.5	-0.3	3.4	0.67
55	2022	nrr	19240	28.9	23.9	2.9	4.9	5.0	4.2	0.51
56	2023	nrr	162	29.5	19.6	2.3	3.5	10.0	3.9	0.18
57	2010	icf	19528	30.9	36.0	4.5	3.8	-5.0	3.4	0.68
58	2011	icf	18996	31.3	36.1	4.2	3.7	-4.7	3.5	0.62
59	2012	icf	18826	31.7	36.0	4.6	3.9	-4.3	4.1	0.55
60	2013	icf	17094	32.3	35.8	5.2	4.0	-3.6	4.7	0.52
61	2014	icf	17346	32.6	35.8	5.4	3.9	-3.3	4.9	0.49
62	2015	icf	16961	32.8	35.7	5.6	4.1	-2.9	5.1	0.48
63	2016	icf	15592	32.8	35.8	5.4	3.9	-3.0	5.0	0.45
64	2017	icf	14509	32.2	35.6	4.7	3.8	-3.5	4.5	0.47
65	2018	icf	15250	31.8	35.9	4.2	3.5	-4.0	4.1	0.43
66	2019	icf	14641	31.1	35.2	3.8	3.7	-4.1	3.9	0.45
67	2020	icf	15331	30.1	34.4	3.1	3.8	-4.3	3.5	0.51
68	2021	icf	11624	29.7	32.8	2.9	4.1	-3.1	3.5	0.52
69	2022	icf	55	30.2	30.9	2.0	3.6	-0.8	4.0	0.02
70	2010	ifl0	18991	27.8	30.0	4.5	4.9	-2.2	3.3	0.75
71	2011	ifl0	18560	28.4	30.1	3.9	4.7	-1.7	3.6	0.67
72	2012	ifl0	18927	28.7	30.1	4.2	5.1	-1.4	4.0	0.63
73	2013	ifl0	17285	29.2	29.8	4.8	5.1	-0.6	4.6	0.57
74	2014	ifl0	17546	29.6	29.7	4.8	5.0	-0.1	4.8	0.53

JER reliability for SS and traditional for nongenotyped females with phenotype

Obs	BYR	name	no	mean_ss	mean_e	std_ss	std_e	mean_dif	std_dif	corr_SS
75	2015	ifl0	16333	30.0	29.8	5.1	5.2	0.2	5.0	0.52
76	2016	ifl0	15241	30.3	29.9	4.9	4.5	0.4	4.8	0.48
77	2017	ifl0	14361	30.0	29.9	4.3	4.2	0.1	4.2	0.51
78	2018	ifl0	15511	30.0	30.5	3.8	3.9	-0.6	4.0	0.47
79	2019	ifl0	15682	29.5	30.2	3.5	4.0	-0.7	3.7	0.54
80	2020	ifl0	17679	29.2	30.4	3.1	4.3	-1.2	3.3	0.65
81	2021	ifl0	21758	29.0	30.2	2.7	4.2	-1.2	3.0	0.70
82	2022	ifl0	18968	28.9	29.1	2.6	4.4	-0.1	3.2	0.70
83	2023	ifl0	162	29.6	25.8	2.3	4.7	3.7	4.5	0.35
84	2010	ifl	22483	29.8	34.3	4.4	4.1	-4.5	3.3	0.70
85	2011	ifl	21889	30.2	34.4	4.0	4.0	-4.3	3.4	0.64
86	2012	ifl	21919	30.5	34.3	4.4	4.2	-3.8	3.9	0.59
87	2013	ifl	19961	31.0	34.2	5.0	4.3	-3.1	4.4	0.55
88	2014	ifl	20361	31.3	34.1	5.1	4.2	-2.8	4.6	0.52
89	2015	ifl	19431	31.6	34.1	5.3	4.4	-2.5	4.8	0.51
90	2016	ifl	17742	31.7	34.2	5.1	4.2	-2.5	4.8	0.48
91	2017	ifl	16738	31.2	34.1	4.5	4.1	-2.9	4.3	0.50
92	2018	ifl	17788	30.9	34.3	4.0	3.8	-3.5	4.0	0.47
93	2019	ifl	17479	30.2	33.7	3.6	4.0	-3.5	3.8	0.51
94	2020	ifl	19216	29.5	33.0	3.0	4.1	-3.5	3.4	0.57
95	2021	ifl	22599	29.3	30.9	2.8	4.3	-1.6	3.4	0.60
96	2022	ifl	18980	29.1	24.9	2.8	5.0	4.2	4.6	0.44
97	2023	ifl	162	29.8	20.4	2.4	3.6	9.4	4.1	0.12
98	2010	ais0	18643	28.6	32.3	4.3	4.2	-3.7	3.4	0.69
99	2011	ais0	18182	29.1	32.4	3.8	4.0	-3.3	3.5	0.60
100	2012	ais0	18641	29.4	32.3	4.2	4.3	-2.9	4.0	0.56
101	2013	ais0	16880	29.9	32.1	4.8	4.4	-2.2	4.6	0.51
102	2014	ais0	17258	30.3	32.0	4.9	4.3	-1.8	4.8	0.47
103	2015	ais0	16060	30.7	32.1	5.2	4.5	-1.4	5.1	0.46
104	2016	ais0	14922	30.9	32.3	5.0	4.1	-1.3	5.0	0.42
105	2017	ais0	13916	30.5	32.2	4.4	3.8	-1.7	4.4	0.44
106	2018	ais0	15103	30.4	32.8	3.9	3.4	-2.4	4.1	0.39
107	2019	ais0	15106	29.9	32.4	3.6	3.6	-2.5	3.7	0.45
108	2020	ais0	17179	29.5	32.4	3.0	3.8	-2.9	3.3	0.55
109	2021	ais0	21500	29.3	31.9	2.6	3.7	-2.7	2.9	0.64
110	2022	ais0	19194	29.1	30.8	2.5	4.1	-1.8	3.0	0.69
111	2023	ais0	162	29.7	28.3	2.3	4.3	1.4	4.0	0.41

JER reliability for SS and traditional for nongenotyped females with phenotype

Obs	BYR	name	no	mean_ss	mean_e	std_ss	std_e	mean_dif	std_dif	corr_SS
112	2010	ais	22409	29.4	33.9	4.4	4.1	-4.5	3.2	0.71
113	2011	ais	21825	29.8	34.0	4.0	4.0	-4.2	3.4	0.64
114	2012	ais	21875	30.2	33.9	4.3	4.2	-3.7	3.9	0.59
115	2013	ais	19845	30.7	33.8	4.9	4.3	-3.1	4.4	0.55
116	2014	ais	20300	31.0	33.7	5.0	4.2	-2.7	4.6	0.52
117	2015	ais	19355	31.2	33.7	5.3	4.4	-2.4	4.8	0.52
118	2016	ais	17706	31.4	33.8	5.1	4.3	-2.4	4.7	0.49
119	2017	ais	16671	30.9	33.7	4.4	4.1	-2.8	4.2	0.52
120	2018	ais	17762	30.6	34.0	4.0	3.8	-3.4	3.9	0.49
121	2019	ais	17435	30.0	33.5	3.6	4.0	-3.4	3.7	0.53
122	2020	ais	19161	29.4	32.9	3.0	4.0	-3.5	3.3	0.60
123	2021	ais	22560	29.2	31.5	2.8	4.1	-2.3	3.1	0.65
124	2022	ais	19200	29.0	29.5	2.8	4.2	-0.5	3.1	0.69
125	2023	ais	162	29.7	27.4	2.4	4.7	2.3	4.2	0.42
126	2010	icf	19528	30.7	35.6	4.5	3.9	-4.9	3.4	0.68
127	2011	icf	18996	31.0	35.7	4.2	3.8	-4.7	3.5	0.62
128	2012	icf	18826	31.5	35.6	4.6	3.9	-4.2	4.0	0.56
129	2013	icf	17094	32.0	35.5	5.2	4.1	-3.5	4.6	0.52
130	2014	icf	17346	32.3	35.5	5.3	3.9	-3.2	4.8	0.49
131	2015	icf	16961	32.5	35.3	5.6	4.2	-2.8	5.0	0.49
132	2016	icf	15592	32.5	35.4	5.3	4.0	-2.9	5.0	0.46
133	2017	icf	14509	31.9	35.3	4.7	3.9	-3.4	4.4	0.48
134	2018	icf	15250	31.6	35.6	4.2	3.5	-3.9	4.1	0.44
135	2019	icf	14641	30.9	34.9	3.8	3.8	-4.0	3.9	0.47
136	2020	icf	15331	29.9	34.0	3.1	3.9	-4.2	3.5	0.53
137	2021	icf	11624	29.6	32.6	2.9	4.1	-3.0	3.4	0.57
138	2022	icf	55	30.0	31.9	2.0	3.1	-1.9	3.6	0.06
139	2010	fert	19528	30.1	34.8	4.5	4.0	-4.7	3.4	0.68
140	2011	fert	18996	30.5	34.9	4.1	3.9	-4.4	3.5	0.61
141	2012	fert	18826	30.9	34.8	4.5	4.0	-3.9	4.1	0.55
142	2013	fert	17094	31.4	34.7	5.1	4.2	-3.2	4.7	0.52
143	2014	fert	17346	31.7	34.6	5.3	4.0	-2.9	4.8	0.48
144	2015	fert	16961	31.9	34.5	5.5	4.3	-2.5	5.1	0.48
145	2016	fert	15592	32.0	34.6	5.3	4.1	-2.6	5.0	0.45
146	2017	fert	14509	31.4	34.5	4.6	4.0	-3.1	4.4	0.48
147	2018	fert	15250	31.1	34.8	4.1	3.6	-3.7	4.1	0.44
148	2019	fert	14641	30.4	34.1	3.7	3.9	-3.7	3.9	0.48

JER reliability for SS and traditional for nongenotyped females with phenotype

Obs	BYR	name	no	mean_ss	mean_e	std_ss	std_e	mean_dif	std_dif	corr_SS
149	2020	fert	15331	29.6	33.4	3.1	4.0	-3.8	3.5	0.55
150	2021	fert	11624	29.5	31.8	3.0	4.2	-2.3	3.5	0.58
151	2022	fert	55	29.9	30.0	1.9	3.1	-0.1	3.5	0.12

JER reliability for SS and traditional for nongenotyped females with phenotype

Obs	diff	d_cr	d_nrr	d_icf	d_ifl	d_ais	d_hst	d_fert	p_cr	p_nrr	p_icf	p_ifl	p_ais	p_hst	p_fert
1	-10	8	.	5	.	3	.	.	0	.	0	.	0	.	.
2	-9	61	35	1962	665	746	.	665	0	0	1	0	0	.	0
3	-8	116	3394	20893	15237	12841	.	15237	0	1	11	6	5	.	8
4	-7	349	15016	38753	32110	29286	.	32110	0	6	20	13	11	.	16
5	-6	3784	26327	34247	34190	35719	.	33440	1	10	17	13	14	.	17
6	-5	15161	33691	21270	32109	35186	.	25135	6	13	11	13	14	.	13
7	-4	27143	32743	12608	26645	28882	.	16627	11	13	6	10	11	.	8
8	-3	28576	26905	10163	19845	22907	.	11445	11	10	5	8	9	.	6
9	-2	25222	21392	11035	17309	19303	.	11354	10	8	6	7	8	.	6
10	-1	21387	18650	10604	15089	17407	.	11514	8	7	5	6	7	.	6
11	0	17799	15760	8284	13135	13660	.	9235	7	6	4	5	5	.	5
12	1	15873	13329	5289	9604	9765	.	6469	6	5	3	4	4	.	3
13	2	15240	10068	3681	7070	6854	.	4251	6	4	2	3	3	.	2
14	3	14976	7751	3119	5248	5346	.	3436	6	3	2	2	2	.	2
15	4	13189	6065	2782	4954	4267	.	3187	5	2	1	2	2	.	2
16	5	10641	5676	2602	5064	3509	.	2665	4	2	1	2	1	.	1
17	6	8543	5027	1904	4721	2507	.	2030	3	2	1	2	1	.	1
18	7	7077	4337	1232	3130	1812	.	1390	3	2	1	1	1	.	1
19	8	6246	3006	1097	2524	1451	.	1193	2	1	1	1	1	.	1
20	9	5199	2731	968	2240	1181	.	983	2	1	0	1	0	.	1
21	10	4319	2022	840	1716	931	.	859	2	1	0	1	0	.	0
22	11	3271	1424	591	1193	667	.	595	1	1	0	0	0	.	0
23	12	2642	1036	478	890	545	.	517	1	0	0	0	0	.	0
24	13	1971	710	378	674	427	.	397	1	0	0	0	0	.	0
25	14	1615	458	260	367	306	.	259	1	0	0	0	0	.	0
26	15	1275	329	188	318	220	.	210	0	0	0	0	0	.	0
27	16	1070	252	163	239	150	.	173	0	0	0	0	0	.	0
28	17	849	151	111	163	132	.	117	0	0	0	0	0	.	0
29	18	633	100	77	95	80	.	79	0	0	0	0	0	.	0
30	19	461	78	54	69	54	.	57	0	0	0	0	0	.	0
31	20	311	49	30	40	32	.	34	0	0	0	0	0	.	0
32	21	291	32	23	21	14	.	20	0	0	0	0	0	.	0
33	22	196	19	7	14	21	.	14	0	0	0	0	0	.	0
34	23	145	12	12	13	13	.	13	0	0	0	0	0	.	0
35	24	92	14	8	15	11	.	14	0	0	0	0	0	.	0
36	25	61	9	9	7	11	.	7	0	0	0	0	0	.	0
37	26	31	6	6	7	6	.	5	0	0	0	0	0	.	0

JER reliability for SS and traditional for nongenotyped females with phenotype

Obs	diff	d_cr	d_nrr	d_icf	d_ifl	d_ais	d_hst	d_fert	p_cr	p_nrr	p_icf	p_ifl	p_ais	p_hst	p_fert
38	27	29	6	7	9	7	.	8	0	0	0	0	0	.	0
39	28	15	4	8	6	3	.	6	0	0	0	0	0	.	0
40	29	13	1	4	2	3	.	2	0	0	0	0	0	.	0
41	30	14	.	.	.	.	.	.	0	.	.	.	.	.	.
42	31	9	.	.	.	.	.	.	0	.	.	.	.	.	.
43	32	11	.	.	.	.	.	.	0	.	.	.	.	.	.
44	33	7	.	.	.	.	.	.	0	.	.	.	.	.	.
45	34	6	.	.	.	.	.	.	0	.	.	.	.	.	.
46	35	7	.	.	.	.	.	.	0	.	.	.	.	.	.
47	36	2	.	1	.	.	.	.	0	.	0	.	.	.	.
48	37	2	.	.	.	.	.	.	0	.	.	.	.	.	.
49	38	6	.	.	1	1	.	1	0	.	.	0	0	.	0
50	41	.	1	.	.	.	.	.	.	0	.	.	.	.	.
51	44	1	.	.	.	.	.	.	0	.	.	.	.	.	.

JER reliability for SS and traditional 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	cr0	55	182	195	74.9	62.6	6.9	12.2	12.3	5.6	0.99
2	2011	cr0	47	155	180	73.8	60.5	6.7	11.6	13.3	5.2	0.98
3	2012	cr0	47	321	612	75.0	62.4	9.0	14.4	12.6	5.6	0.99
4	2013	cr0	50	238	479	72.5	58.3	9.4	15.7	14.2	6.4	0.99
5	2014	cr0	36	417	546	77.1	65.7	11.7	19.1	11.4	7.4	1.00
6	2015	cr0	30	1056	1078	86.5	80.7	9.7	15.8	5.8	6.2	1.00
7	2016	cr0	26	716	761	83.5	74.8	10.9	17.3	8.7	6.6	0.99
8	2017	cr0	29	1265	1018	88.1	81.8	9.5	14.9	6.2	5.5	0.99
9	2018	cr0	21	927	1245	78.0	63.1	14.0	22.3	14.9	8.6	0.99
10	2019	cr0	30	1255	1082	84.5	71.5	12.7	19.6	13.0	7.2	0.99
11	2020	cr0	12	413	454	72.8	54.5	13.1	17.6	18.3	4.6	1.00
12	2010	cr	55	204	219	85.2	71.6	5.4	10.8	13.6	5.5	0.99
13	2011	cr	47	175	202	84.7	70.1	5.3	10.3	14.5	5.1	0.99
14	2012	cr	47	355	667	85.6	71.7	6.1	11.9	13.9	5.8	0.99
15	2013	cr	50	267	524	83.7	67.9	6.8	13.5	15.8	6.8	0.99
16	2014	cr	36	461	595	86.8	74.1	8.1	16.0	12.7	8.0	1.00
17	2015	cr	30	1146	1155	92.9	86.1	6.1	12.6	6.7	6.6	1.00
18	2016	cr	26	759	802	90.3	81.0	7.5	14.7	9.2	7.2	1.00
19	2017	cr	29	1317	1050	90.8	85.7	6.2	12.4	5.1	6.4	0.98
20	2018	cr	21	948	1274	77.6	64.1	10.4	21.8	13.5	11.6	0.99
21	2019	cr	30	1259	1086	71.3	63.6	9.1	19.2	7.8	11.7	0.90
22	2020	cr	12	413	454	62.3	44.8	3.6	12.0	17.5	8.8	0.93
23	2010	nrr0	55	177	190	62.6	59.1	9.5	12.4	3.5	3.1	1.00
24	2011	nrr0	47	152	177	60.7	56.8	9.1	11.7	3.9	2.9	0.99
25	2012	nrr0	47	314	598	62.4	58.9	12.7	15.3	3.6	2.9	1.00
26	2013	nrr0	50	231	464	59.0	54.4	12.9	16.4	4.6	3.7	1.00
27	2014	nrr0	36	406	530	65.4	62.3	16.2	20.1	3.0	4.1	1.00
28	2015	nrr0	30	1032	1052	78.5	78.3	14.5	17.1	0.1	3.0	1.00
29	2016	nrr0	26	700	745	73.7	72.6	15.8	18.2	1.2	3.4	0.99
30	2017	nrr0	29	1239	998	81.1	81.2	13.9	15.5	-0.1	2.3	0.99
31	2018	nrr0	21	912	1224	67.5	64.3	18.4	22.1	3.2	3.9	1.00
32	2019	nrr0	30	1332	1101	77.5	76.3	15.9	19.1	1.2	3.4	1.00
33	2020	nrr0	14	688	664	70.2	67.8	14.8	17.8	2.4	3.2	1.00
34	2010	nrr	55	202	217	67.9	66.6	8.9	11.8	1.3	3.0	0.99
35	2011	nrr	47	173	201	66.4	64.7	8.4	11.1	1.6	3.1	0.99
36	2012	nrr	47	353	663	67.9	66.6	11.0	13.4	1.3	2.7	0.99
37	2013	nrr	50	264	518	64.7	62.6	11.3	14.8	2.2	3.8	0.99

JER reliability for SS and traditional 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	2014	nrr	36	456	589	70.2	69.6	14.0	17.8	0.7	4.1	1.00
39	2015	nrr	30	1137	1146	80.8	83.2	12.1	14.4	-2.4	2.9	0.99
40	2016	nrr	26	754	797	76.0	77.5	13.8	16.2	-1.5	3.6	0.98
41	2017	nrr	29	1310	1046	77.8	83.4	11.4	13.6	-5.6	4.2	0.96
42	2018	nrr	21	947	1271	60.2	62.3	13.8	22.4	-2.1	8.9	0.99
43	2019	nrr	30	1345	1114	55.0	62.0	10.6	19.7	-7.0	10.0	0.96
44	2020	nrr	14	688	664	43.3	43.1	2.4	10.1	0.2	8.4	0.78
45	2010	icf	55	174	189	78.2	75.3	7.7	9.9	2.8	2.3	1.00
46	2011	icf	47	147	174	77.0	73.8	7.1	9.5	3.2	2.6	0.99
47	2012	icf	47	303	566	78.1	75.1	8.6	10.7	2.9	2.3	1.00
48	2013	icf	50	230	444	75.6	71.6	9.5	12.5	4.0	3.2	0.99
49	2014	icf	36	399	509	80.1	77.4	11.5	14.4	2.7	3.1	1.00
50	2015	icf	30	966	965	88.7	88.5	9.0	11.0	0.2	2.4	0.99
51	2016	icf	26	634	662	84.9	83.9	10.8	13.3	1.0	3.0	0.99
52	2017	icf	29	1003	792	87.0	88.9	8.7	10.6	-1.9	2.8	0.98
53	2018	icf	20	648	869	73.1	71.4	12.4	18.9	1.7	6.6	1.00
54	2019	icf	22	449	489	72.1	73.2	11.4	18.3	-1.1	7.1	1.00
55	2010	ifl0	55	172	185	61.5	58.3	9.5	12.4	3.2	3.1	1.00
56	2011	ifl0	47	147	172	59.5	56.0	9.1	11.9	3.5	3.1	0.99
57	2012	ifl0	47	306	583	61.3	58.1	12.9	15.4	3.2	2.8	1.00
58	2013	ifl0	50	225	451	57.8	53.6	13.0	16.4	4.2	3.7	0.99
59	2014	ifl0	36	395	515	64.4	61.7	16.4	20.2	2.6	4.1	1.00
60	2015	ifl0	30	1006	1023	77.6	77.9	14.8	17.5	-0.3	3.0	1.00
61	2016	ifl0	26	686	730	72.8	72.0	16.1	18.3	0.8	3.4	0.99
62	2017	ifl0	29	1211	975	80.3	80.7	14.2	15.7	-0.3	2.4	0.99
63	2018	ifl0	21	896	1203	66.9	63.9	18.7	22.3	3.0	3.8	1.00
64	2019	ifl0	30	1309	1082	77.1	76.2	16.2	19.1	0.9	3.1	1.00
65	2020	ifl0	14	681	657	69.9	67.6	14.8	17.9	2.3	3.3	1.00
66	2010	ifl	55	201	215	75.4	72.7	8.2	10.6	2.6	2.5	1.00
67	2011	ifl	47	172	200	74.0	71.1	7.8	10.1	2.9	2.5	0.99
68	2012	ifl	47	351	660	75.3	72.6	9.6	11.7	2.7	2.3	1.00
69	2013	ifl	50	262	514	72.6	68.8	10.3	13.2	3.8	3.2	0.99
70	2014	ifl	36	454	585	77.4	75.1	12.4	15.5	2.3	3.3	1.00
71	2015	ifl	30	1130	1139	86.8	87.0	10.0	11.9	-0.2	2.3	0.99
72	2016	ifl	26	750	792	82.8	82.3	11.8	14.1	0.5	3.0	0.99
73	2017	ifl	29	1299	1038	85.3	87.3	9.6	11.4	-2.0	2.9	0.98
74	2018	ifl	21	938	1260	68.7	67.2	14.1	21.0	1.5	7.3	0.99

JER reliability for SS and traditional 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	2019	ifl	30	1324	1098	63.4	65.4	12.1	20.0	-2.1	8.9	0.97
76	2020	ifl	14	681	657	49.4	43.7	2.2	9.5	5.6	8.0	0.75
77	2010	ais0	55	169	181	68.1	65.7	8.9	11.8	2.4	3.1	1.00
78	2011	ais0	47	144	168	66.3	63.8	8.6	11.1	2.5	2.9	0.99
79	2012	ais0	47	301	572	67.9	65.9	11.4	13.6	2.1	2.9	0.99
80	2013	ais0	50	222	441	64.8	61.9	11.9	15.0	2.9	3.6	0.99
81	2014	ais0	36	388	508	70.5	68.4	14.9	18.5	2.1	4.1	0.99
82	2015	ais0	30	983	1001	82.6	82.7	12.7	15.8	-0.1	5.3	0.95
83	2016	ais0	26	673	716	78.2	77.7	14.3	16.7	0.5	4.0	0.98
84	2017	ais0	29	1190	964	84.8	81.8	12.2	19.3	3.0	9.8	0.90
85	2018	ais0	21	889	1195	72.1	67.2	17.1	24.8	4.9	14.7	0.81
86	2019	ais0	30	1317	1086	81.8	69.0	14.7	29.3	12.8	22.3	0.67
87	2020	ais0	14	688	664	75.5	72.6	14.2	26.0	2.9	24.8	0.36
88	2010	ais	55	200	214	73.8	71.7	8.5	10.9	2.2	2.5	1.00
89	2011	ais	47	171	197	72.4	69.9	8.0	10.4	2.5	2.7	0.99
90	2012	ais	47	350	658	73.7	71.6	9.9	12.0	2.1	2.4	1.00
91	2013	ais	50	262	512	71.1	67.8	10.6	13.6	3.2	3.3	0.99
92	2014	ais	36	453	584	76.0	74.1	13.0	16.0	1.8	3.3	1.00
93	2015	ais	30	1126	1133	85.8	86.5	10.7	12.3	-0.6	2.2	0.99
94	2016	ais	26	749	791	81.3	81.5	12.2	14.4	-0.2	3.1	0.99
95	2017	ais	29	1297	1036	83.1	86.8	10.0	12.3	-3.7	3.9	0.96
96	2018	ais	21	941	1265	66.5	70.8	12.8	21.1	-4.2	12.0	0.86
97	2019	ais	30	1334	1104	62.4	73.5	9.5	22.5	-11.0	18.7	0.58
98	2020	ais	14	688	664	52.6	58.4	4.1	28.0	-5.7	27.6	0.17
99	2010	icf	55	174	189	77.4	74.6	7.9	10.0	2.8	2.2	1.00
100	2011	icf	47	147	174	76.4	73.1	7.5	9.6	3.3	2.4	0.99
101	2012	icf	47	303	566	77.3	74.5	9.0	11.0	2.9	2.2	1.00
102	2013	icf	50	230	444	74.7	70.9	9.8	12.7	3.8	3.2	0.99
103	2014	icf	36	399	509	79.3	76.8	11.9	14.8	2.5	3.1	1.00
104	2015	icf	30	966	965	88.3	88.0	9.3	11.3	0.3	2.3	0.99
105	2016	icf	26	634	662	84.4	83.4	11.2	13.5	1.0	2.9	0.99
106	2017	icf	29	1003	792	86.4	88.3	9.0	10.9	-1.9	2.9	0.98
107	2018	icf	20	648	869	71.2	73.2	12.8	18.8	-2.0	8.8	0.91
108	2019	icf	22	449	489	69.0	74.5	11.0	20.8	-5.5	15.9	0.66
109	2010	fert	55	174	189	75.4	72.7	8.2	10.6	2.6	2.5	1.00
110	2011	fert	47	147	174	74.0	71.1	7.8	10.1	2.9	2.5	0.99
111	2012	fert	47	303	566	75.3	72.6	9.6	11.7	2.7	2.3	1.00

JER reliability for SS and traditional 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	2013	fert	50	230	444	72.6	68.8	10.3	13.2	3.8	3.2	0.99
113	2014	fert	36	399	509	77.4	75.1	12.4	15.5	2.3	3.3	1.00
114	2015	fert	30	966	965	86.8	87.0	10.0	11.9	-0.2	2.3	0.99
115	2016	fert	26	634	662	82.8	82.3	11.8	14.1	0.5	3.0	0.99
116	2017	fert	29	1003	792	85.3	87.3	9.6	11.4	-2.0	2.9	0.98
117	2018	fert	20	648	869	69.7	68.9	13.7	20.0	0.8	6.7	0.99
118	2019	fert	22	449	489	67.9	72.3	11.0	18.3	-4.4	7.7	0.99

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

Obs	diff	d_cr	d_nrr	d_icf	d_ifl	d_ais	d_hst	d_fert	p_cr	p_nrr	p_icf	p_ifl	p_ais	p_hst	p_fert
1	-37	.	.	.	.	2	.	.	.	.	.	.	1	.	.
2	-36	.	.	.	.	2	.	.	.	.	.	.	1	.	.
3	-33	.	.	.	.	1	.	.	.	.	.	.	1	.	.
4	-30	.	.	.	.	4	.	.	.	.	.	.	3	.	.
5	-29	.	.	.	.	3	.	.	.	.	.	.	2	.	.
6	-27	.	.	.	.	1	.	.	.	.	.	.	1	.	.
7	-26	.	.	.	.	2	.	.	.	.	.	.	1	.	.
8	-24	.	.	.	.	1	.	.	.	.	.	.	1	.	.
9	-23	.	.	.	.	2	.	.	.	.	.	.	1	.	.
10	-22	.	.	.	.	2	.	.	.	.	.	.	1	.	.
11	-21	.	.	.	.	1	.	.	.	.	.	.	1	.	.
12	-20	.	1	.	.	1	.	.	.	1	.	.	1	.	.
13	-19	.	1	.	.	.	.	.	.	1	.	.	.	.	.
14	-18	.	2	.	.	2	.	.	.	1	.	.	1	.	.
15	-17	.	5	.	.	1	.	.	.	3	.	.	1	.	.
16	-16	.	2	.	.	3	.	.	.	1	.	.	2	.	.
17	-15	.	2	.	.	.	.	.	.	1	.	.	.	.	.
18	-14	.	1	.	.	2	.	.	.	1	.	.	1	.	.
19	-13	.	4	.	.	.	.	.	.	3	.	.	.	.	.
20	-12	.	3	.	2	1	.	2	.	2	.	1	1	.	2
21	-11	.	2	.	4	5	.	4	.	1	.	3	3	.	3
22	-10	.	7	.	6	1	.	5	.	5	.	4	1	.	4
23	-9	.	3	1	1	3	.	.	.	2	1	1	2	.	.
24	-8	1	5	6	2	3	.	2	1	3	5	1	2	.	2
25	-7	.	4	3	3	2	.	3	.	3	2	2	1	.	2
26	-6	1	7	6	6	4	.	5	1	5	5	4	3	.	4
27	-5	1	10	6	4	2	.	4	1	7	5	3	1	.	3
28	-4	2	21	6	7	6	.	5	1	14	5	5	4	.	4
29	-3	5	13	3	7	9	.	6	3	9	2	5	6	.	5
30	-2	4	3	11	21	25	.	21	3	2	9	14	17	.	17
31	-1	6	6	35	28	10	.	27	4	4	28	19	7	.	21
32	0	6	5	7	5	5	.	5	4	3	6	3	3	.	4
33	1	15	4	3	5	5	.	5	10	3	2	3	3	.	4
34	2	13	6	9	6	4	.	5	9	4	7	4	3	.	4
35	3	12	7	7	7	5	.	7	8	5	6	5	3	.	6
36	4	6	4	2	1	6	.	1	4	3	2	1	4	.	1
37	5	4	7	6	8	1	.	6	3	5	5	5	1	.	5

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

Obs	diff	d_cr	d_nrr	d_icf	d_ifl	d_ais	d_hst	d_fert	p_cr	p_nrr	p_icf	p_ifl	p_ais	p_hst	p_fert
38	6	4	3	3	4	1	.	4	3	2	2	3	1	.	3
39	7	.	4	2	4	4	.	3	.	3	2	3	3	.	2
40	8	5	2	3	4	2	.	2	3	1	2	3	1	.	2
41	9	1	1	3	1	2	.	1	1	1	2	1	1	.	1
42	10	2	3	2	4	.	.	3	1	2	2	3	.	.	2
43	11	2	1	2	1	1	.	.	1	1	2	1	1	.	.
44	12	1	1	.	3	.	.	1	1	1	.	2	.	.	1
45	13	4	.	1	1	.	.	.	3	.	1	1	.	.	.
46	14	1	.	.	2	2	.	.	1	.	.	1	1	.	.
47	15	6	.	.	2	.	.	.	4	.	.	1	.	.	.
48	16	6	.	.	1	.	.	.	4	.	.	1	.	.	.
49	17	3	.	.	.	1	.	.	2	.	.	.	1	.	.
50	18	5	.	.	.	1	.	.	3	.	.	.	1	.	.
51	19	4	.	.	.	1	.	.	3	.	.	.	1	.	.
52	20	1	.	.	.	1	.	.	1	.	.	.	1	.	.
53	21	7	.	.	.	.	.	.	5	.	.	.	.	.	.
54	22	4	.	.	.	1	.	.	3	.	.	.	1	.	.
55	23	4	.	.	.	3	.	.	3	.	.	.	2	.	.
56	24	5	.	.	.	1	.	.	3	.	.	.	1	.	.
57	25	2	.	.	.	.	.	.	1	.	.	.	.	.	.
58	26	1	.	.	.	2	.	.	1	.	.	.	1	.	.
59	27	3	.	.	.	.	.	.	2	.	.	.	.	.	.
60	30	1	.	.	.	.	.	.	1	.	.	.	.	.	.

JER reliability for SS and twostep 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	fert	3515	51.2	68.3	2.9	2.2	-17.1	1.4	0.89
2	2016	fert	3920	51.0	68.0	2.6	2.1	-17.0	1.2	0.90
3	2017	fert	5162	50.5	67.7	2.5	2.2	-17.2	1.1	0.90
4	2018	fert	6402	50.6	67.7	2.4	2.2	-17.1	1.0	0.90
5	2019	fert	7573	49.8	67.2	2.4	2.3	-17.4	1.1	0.89
6	2020	fert	8568	48.7	66.7	2.5	2.4	-18.0	1.1	0.90
7	2021	fert	6760	46.2	65.1	2.6	2.5	-18.9	1.1	0.91
8	2022	fert	32	43.9	62.8	3.1	3.0	-18.9	1.3	0.91

JER reliability for SS and twostep for genotyped females with phenotype

Obs	diff	d_fert	p_fert
1	-23	4	0
2	-22	63	0
3	-21	558	1
4	-20	2599	6
5	-19	6779	16
6	-18	12108	29
7	-17	12788	30
8	-16	5539	13
9	-15	1095	3
10	-14	220	1
11	-13	80	0
12	-12	49	0
13	-11	22	0
14	-10	4	0
15	-9	3	0
16	-8	5	0
17	-7	4	0
18	-6	7	0
19	-5	2	0
20	-4	2	0
21	-3	1	0

JER reliability for SS and twostep for nordic AI bulls without offspring

Obs	BYR	name	no	mean_noff	std_noff	mean_ss	mean_e	std_ss	std_e	mean_dif	std_dif	corr_SS
1	2019	fert	21	.	.	49.4	67.3	1.7	1.2	-18.0	0.8	0.91
2	2020	fert	32	.	.	48.1	66.1	2.2	1.6	-18.0	1.0	0.92
3	2021	fert	40	.	.	42.3	62.0	3.3	3.1	-19.7	0.7	0.98
4	2022	fert	34	.	.	38.5	59.1	2.5	1.8	-20.5	0.8	0.98
5	2023	fert	28	.	.	36.1	57.4	1.7	1.5	-21.3	0.8	0.88

JER reliability for SS and twostep for nordic AI bulls without offspring

Obs	diff	d_fert	p_fert
1	-23	1	1
2	-22	13	8
3	-21	36	23
4	-20	34	22
5	-19	32	21
6	-18	24	15
7	-17	12	8
8	-16	3	2

JER sum sta for SS and prev SS breeding value for genotyped females without phenotype, by birth year

Obs	BYR	name	no	mean_ss	mean_oss	std_ss	std_oss	mean_dif	std_dif	corr_SS
1	2019	cr0	4540	97.4	98.7	13.1	13.0	-1.3	1.1	1.00
2	2020	cr0	5983	98.1	99.2	12.5	12.4	-1.2	1.3	0.99
3	2021	cr0	2111	105.9	107.3	12.0	12.1	-1.4	1.4	0.99
4	2022	cr0	3885	104.0	105.2	10.9	10.7	-1.2	2.0	0.98
5	2023	cr0	14833	106.0	107.1	10.3	10.1	-1.1	1.9	0.98
6	2024	cr0	3030	106.7	107.7	10.0	9.9	-1.0	1.4	0.99
7	2019	cr1	5827	97.6	98.9	10.5	10.6	-1.3	1.1	0.99
8	2020	cr1	7590	99.0	100.0	9.9	10.0	-1.0	1.2	0.99
9	2021	cr1	8573	105.6	107.2	10.6	10.8	-1.6	1.4	0.99
10	2022	cr1	16348	103.6	104.8	9.4	9.4	-1.2	1.5	0.99
11	2023	cr1	14987	105.1	106.4	9.1	9.0	-1.3	1.4	0.99
12	2024	cr1	3030	105.1	106.5	8.3	8.4	-1.4	1.3	0.99
13	2019	cr2	7162	97.8	99.0	10.6	10.7	-1.2	1.2	0.99
14	2020	cr2	10998	99.4	100.3	9.7	9.8	-0.9	1.3	0.99
15	2021	cr2	15468	105.8	107.4	10.1	10.3	-1.6	1.5	0.99
16	2022	cr2	16456	103.4	104.5	9.0	9.0	-1.1	1.5	0.99
17	2023	cr2	14987	104.7	106.0	8.9	8.8	-1.3	1.4	0.99
18	2024	cr2	3030	104.9	106.2	8.1	8.3	-1.3	1.3	0.99
19	2019	cr3	10143	98.5	99.6	9.7	9.8	-1.1	1.2	0.99
20	2020	cr3	15926	100.3	101.0	9.0	9.0	-0.7	1.3	0.99
21	2021	cr3	15583	105.1	106.5	9.1	9.2	-1.4	1.4	0.99
22	2022	cr3	16456	103.0	104.0	8.2	8.1	-1.0	1.4	0.98
23	2023	cr3	14987	104.1	105.2	8.1	8.0	-1.1	1.4	0.99
24	2024	cr3	3030	104.3	105.5	7.4	7.6	-1.1	1.3	0.99
25	2019	cr	4103	98.4	99.6	10.3	10.4	-1.3	1.2	0.99
26	2020	cr	5723	99.3	100.2	9.7	9.7	-0.9	1.3	0.99
27	2021	cr	2070	104.7	106.3	10.1	10.3	-1.5	1.4	0.99
28	2022	cr	3881	103.0	104.1	9.0	9.0	-1.1	1.4	0.99
29	2023	cr	14833	104.7	106.0	8.8	8.8	-1.3	1.4	0.99
30	2024	cr	3030	104.9	106.2	8.1	8.3	-1.3	1.3	0.99
31	2019	nrr0	4746	98.5	99.5	10.8	10.8	-1.0	1.3	0.99
32	2020	nrr0	6195	98.2	99.1	10.4	10.3	-0.9	1.4	0.99
33	2021	nrr0	2535	103.6	104.3	10.1	9.9	-0.7	1.6	0.99
34	2022	nrr0	2987	101.1	101.9	9.8	9.8	-0.9	2.0	0.98
35	2023	nrr0	12518	102.5	103.3	9.3	9.1	-0.9	2.4	0.97
36	2024	nrr0	3030	102.8	103.3	9.0	8.9	-0.6	1.6	0.98
37	2019	nrr1	6027	99.4	100.3	8.8	8.8	-0.9	1.2	0.99

JER sum sta for SS and prev SS breeding value for genotyped females without phenotype, by birth year

Obs	BYR	name	no	mean_ss	mean_oss	std_ss	std_oss	mean_dif	std_dif	corr_SS
38	2020	nrr1	7795	99.2	99.9	8.2	8.2	-0.6	1.3	0.99
39	2021	nrr1	7678	103.0	103.2	8.4	8.0	-0.2	1.7	0.98
40	2022	nrr1	15358	101.0	101.6	7.9	7.3	-0.6	2.2	0.96
41	2023	nrr1	14987	102.4	103.1	7.6	7.3	-0.6	1.7	0.97
42	2024	nrr1	3030	101.6	102.6	7.0	6.8	-1.0	1.6	0.97
43	2019	nrr2	7314	100.2	100.7	9.4	9.5	-0.5	1.3	0.99
44	2020	nrr2	10160	99.4	99.8	8.7	8.6	-0.4	1.5	0.98
45	2021	nrr2	14782	102.7	102.7	7.8	7.6	0.0	1.6	0.98
46	2022	nrr2	16456	100.9	101.3	7.4	7.2	-0.4	1.7	0.97
47	2023	nrr2	14987	101.9	102.3	7.2	7.0	-0.4	1.4	0.98
48	2024	nrr2	3030	101.9	102.6	6.7	6.5	-0.7	1.4	0.98
49	2019	nrr3	9683	99.8	100.1	8.4	8.4	-0.3	1.3	0.99
50	2020	nrr3	15544	100.2	100.6	7.7	7.5	-0.4	1.4	0.98
51	2021	nrr3	15583	102.1	102.1	6.9	6.8	0.0	1.5	0.98
52	2022	nrr3	16456	100.9	101.2	6.2	6.1	-0.4	1.6	0.97
53	2023	nrr3	14987	101.6	102.1	6.0	6.0	-0.5	1.2	0.98
54	2024	nrr3	3030	101.3	102.0	5.6	5.5	-0.7	1.2	0.98
55	2019	nrr	4198	100.0	100.6	8.8	8.9	-0.5	1.2	0.99
56	2020	nrr	5803	99.6	100.0	8.2	8.1	-0.5	1.3	0.99
57	2021	nrr	2291	102.2	102.3	7.6	7.4	-0.1	1.5	0.98
58	2022	nrr	2962	100.9	101.3	7.0	6.8	-0.4	1.7	0.97
59	2023	nrr	12518	102.0	102.6	6.8	6.7	-0.5	1.3	0.98
60	2024	nrr	3030	101.6	102.5	6.3	6.2	-0.8	1.3	0.98
61	2019	icf1	5966	98.1	98.2	8.2	8.2	-0.1	0.9	0.99
62	2020	icf1	7729	100.2	100.3	8.7	8.7	-0.1	1.0	0.99
63	2021	icf1	7561	101.3	101.7	8.1	7.8	-0.3	1.7	0.98
64	2022	icf1	15523	102.2	102.2	8.8	8.4	-0.1	1.8	0.98
65	2023	icf1	14987	102.4	102.6	7.9	7.7	-0.2	1.4	0.98
66	2024	icf1	3030	102.8	103.0	7.0	6.9	-0.1	1.4	0.98
67	2019	icf2	7234	97.8	97.9	8.5	8.6	-0.1	1.0	0.99
68	2020	icf2	10119	100.2	100.3	9.1	9.1	-0.1	1.1	0.99
69	2021	icf2	14993	101.1	101.2	8.3	7.9	-0.2	1.8	0.98
70	2022	icf2	16456	102.1	102.1	8.9	8.6	0.0	1.5	0.98
71	2023	icf2	14987	102.3	102.5	7.9	7.8	-0.1	1.3	0.99
72	2024	icf2	3030	102.7	103.0	7.1	7.0	-0.3	1.3	0.98
73	2019	icf3	9632	98.3	98.5	8.3	8.3	-0.2	1.3	0.99
74	2020	icf3	15663	100.6	100.7	8.7	8.7	-0.1	1.4	0.99

JER sum sta for SS and prev SS breeding value for genotyped females without phenotype, by birth year

Obs	BYR	name	no	mean_ss	mean_oss	std_ss	std_oss	mean_dif	std_dif	corr_SS
75	2021	icf3	15583	101.3	101.5	8.1	7.8	-0.2	1.8	0.98
76	2022	icf3	16456	102.0	102.0	8.5	8.3	0.0	1.7	0.98
77	2023	icf3	14987	102.9	103.0	7.6	7.6	-0.1	1.3	0.99
78	2024	icf3	3030	103.1	103.3	7.0	7.0	-0.2	1.3	0.98
79	2019	icf	5631	98.2	98.4	8.0	8.0	-0.2	1.0	0.99
80	2020	icf	7503	100.2	100.3	8.6	8.6	-0.1	1.1	0.99
81	2021	icf	7535	101.1	101.4	8.1	7.8	-0.3	1.6	0.98
82	2022	icf	15523	102.1	102.1	8.6	8.3	0.0	1.6	0.98
83	2023	icf	14987	102.6	102.7	7.7	7.6	-0.1	1.3	0.99
84	2024	icf	3030	102.9	103.1	6.9	6.8	-0.2	1.3	0.98
85	2019	ifl0	4944	97.8	98.6	11.8	11.8	-0.7	1.3	0.99
86	2020	ifl0	6402	98.5	99.4	11.7	11.7	-0.8	1.5	0.99
87	2021	ifl0	2800	104.0	104.7	10.6	10.5	-0.7	1.6	0.99
88	2022	ifl0	3226	102.3	103.0	10.0	9.9	-0.8	2.1	0.98
89	2023	ifl0	12526	103.1	104.1	9.1	9.1	-1.0	2.3	0.97
90	2024	ifl0	3030	103.5	104.0	8.9	8.8	-0.5	1.8	0.98
91	2019	ifl1	5999	97.5	98.5	10.0	10.1	-1.0	1.3	0.99
92	2020	ifl1	7776	99.7	100.4	10.3	10.3	-0.7	1.4	0.99
93	2021	ifl1	7617	104.1	104.6	10.3	9.9	-0.5	1.8	0.99
94	2022	ifl1	15345	103.4	104.1	10.0	9.5	-0.7	2.1	0.98
95	2023	ifl1	14987	104.5	105.4	8.8	8.8	-0.9	1.8	0.98
96	2024	ifl1	3030	104.4	105.6	8.2	8.1	-1.2	1.7	0.98
97	2019	ifl2	7262	97.9	98.5	10.5	10.8	-0.6	1.5	0.99
98	2020	ifl2	10112	99.8	100.4	10.3	10.4	-0.6	1.7	0.99
99	2021	ifl2	14772	103.6	103.9	9.9	9.6	-0.3	1.9	0.98
100	2022	ifl2	16456	103.2	103.8	9.6	9.3	-0.6	2.0	0.98
101	2023	ifl2	14987	104.0	104.8	8.7	8.7	-0.8	1.8	0.98
102	2024	ifl2	3030	103.7	104.8	8.2	8.1	-1.1	1.6	0.98
103	2019	ifl3	9629	98.2	98.8	10.5	10.8	-0.6	1.8	0.99
104	2020	ifl3	15534	100.9	101.4	10.1	10.2	-0.5	1.8	0.98
105	2021	ifl3	15583	103.5	103.8	9.6	9.5	-0.4	2.0	0.98
106	2022	ifl3	16456	103.2	103.8	9.4	9.2	-0.5	2.1	0.97
107	2023	ifl3	14987	104.2	105.1	8.5	8.6	-0.9	1.8	0.98
108	2024	ifl3	3030	103.8	104.9	8.0	8.0	-1.2	1.7	0.98
109	2019	ifl	4255	98.2	99.0	10.2	10.5	-0.8	1.4	0.99
110	2020	ifl	5855	100.1	100.7	10.1	10.3	-0.6	1.5	0.99
111	2021	ifl	2458	103.4	103.9	10.0	9.7	-0.4	1.8	0.98

JER sum sta for SS and prev SS breeding value for genotyped females without phenotype, by birth year

Obs	BYR	name	no	mean_ss	mean_oss	std_ss	std_oss	mean_dif	std_dif	corr_SS
112	2022	ifl	3200	103.1	103.8	9.7	9.3	-0.6	2.0	0.98
113	2023	ifl	12526	104.4	105.3	8.6	8.6	-0.9	1.7	0.98
114	2024	ifl	3030	104.0	105.2	8.1	8.1	-1.2	1.6	0.98
115	2019	ais0	5021	98.6	99.7	12.3	12.2	-1.1	1.3	0.99
116	2020	ais0	6510	98.1	98.9	11.6	11.4	-0.8	1.5	0.99
117	2021	ais0	2767	103.9	104.6	11.1	10.9	-0.8	1.6	0.99
118	2022	ais0	3017	100.9	101.7	11.2	11.1	-0.8	2.1	0.98
119	2023	ais0	12518	101.9	103.0	10.3	10.1	-1.1	2.7	0.97
120	2024	ais0	3030	102.8	103.4	9.7	9.6	-0.6	1.8	0.98
121	2019	ais1	6067	98.3	99.2	9.6	9.6	-0.9	1.1	0.99
122	2020	ais1	7836	99.1	99.8	9.1	9.0	-0.8	1.2	0.99
123	2021	ais1	7734	103.9	104.6	9.5	9.3	-0.7	1.3	0.99
124	2022	ais1	15659	101.7	102.6	8.9	8.6	-0.9	1.6	0.98
125	2023	ais1	14987	102.1	103.2	8.3	8.3	-1.1	1.6	0.98
126	2024	ais1	3030	102.4	103.5	7.6	7.5	-1.1	1.3	0.98
127	2019	ais2	7343	99.1	99.7	10.3	10.4	-0.5	1.3	0.99
128	2020	ais2	10251	99.2	99.7	9.2	9.2	-0.5	1.4	0.99
129	2021	ais2	15037	103.4	104.1	9.0	9.0	-0.7	1.6	0.98
130	2022	ais2	16456	101.4	101.9	8.6	8.5	-0.5	1.6	0.98
131	2023	ais2	14987	101.2	102.3	8.4	8.4	-1.1	1.7	0.98
132	2024	ais2	3030	101.7	102.8	7.5	7.5	-1.1	1.5	0.98
133	2019	ais3	9735	99.2	99.7	9.5	9.6	-0.5	1.5	0.99
134	2020	ais3	15687	100.1	100.4	8.4	8.3	-0.4	1.6	0.98
135	2021	ais3	15583	102.8	103.5	8.2	8.2	-0.7	1.7	0.98
136	2022	ais3	16456	101.1	101.5	7.6	7.6	-0.4	1.6	0.98
137	2023	ais3	14987	101.1	102.1	7.8	7.7	-1.1	1.7	0.98
138	2024	ais3	3030	101.3	102.4	6.9	6.9	-1.0	1.5	0.98
139	2019	ais	4272	99.3	100.0	9.5	9.6	-0.7	1.2	0.99
140	2020	ais	5872	99.4	99.9	8.7	8.7	-0.5	1.3	0.99
141	2021	ais	2393	102.8	103.5	8.8	8.8	-0.7	1.4	0.99
142	2022	ais	2995	101.2	101.8	8.2	8.1	-0.6	1.5	0.98
143	2023	ais	12518	101.6	102.7	7.9	7.9	-1.1	1.6	0.98
144	2024	ais	3030	101.8	102.9	7.1	7.1	-1.1	1.3	0.98
145	2019	hst0	13182	.	.	.	.	.	.	.
146	2020	hst0	16004	.	.	.	.	.	.	.
147	2021	hst0	15583	.	.	.	.	.	.	.
148	2022	hst0	16456	.	.	.	.	.	.	.

JER sum sta for SS and prev SS breeding value for genotyped females without phenotype, by birth year

Obs	BYR	name	no	mean_ss	mean_oss	std_ss	std_oss	mean_dif	std_dif	corr_SS
149	2023	hst0	14987	.	.	.	.	.	.	.
150	2024	hst0	3030	.	.	.	.	.	.	.
151	2019	hst1	13182	.	.	.	.	.	.	.
152	2020	hst1	16004	.	.	.	.	.	.	.
153	2021	hst1	15583	.	.	.	.	.	.	.
154	2022	hst1	16456	.	.	.	.	.	.	.
155	2023	hst1	14987	.	.	.	.	.	.	.
156	2024	hst1	3030	.	.	.	.	.	.	.
157	2019	hst2	13182	.	.	.	.	.	.	.
158	2020	hst2	16004	.	.	.	.	.	.	.
159	2021	hst2	15583	.	.	.	.	.	.	.
160	2022	hst2	16456	.	.	.	.	.	.	.
161	2023	hst2	14987	.	.	.	.	.	.	.
162	2024	hst2	3030	.	.	.	.	.	.	.
163	2019	hst3	13182	.	.	.	.	.	.	.
164	2020	hst3	16004	.	.	.	.	.	.	.
165	2021	hst3	15583	.	.	.	.	.	.	.
166	2022	hst3	16456	.	.	.	.	.	.	.
167	2023	hst3	14987	.	.	.	.	.	.	.
168	2024	hst3	3030	.	.	.	.	.	.	.
169	2019	hst	13182	.	.	.	.	.	.	.
170	2020	hst	16004	.	.	.	.	.	.	.
171	2021	hst	15583	.	.	.	.	.	.	.
172	2022	hst	16456	.	.	.	.	.	.	.
173	2023	hst	14987	.	.	.	.	.	.	.
174	2024	hst	3030	.	.	.	.	.	.	.
175	2019	fert	5631	97.9	98.7	10.4	10.6	-0.8	1.3	0.99
176	2020	fert	7503	99.7	100.4	10.1	10.2	-0.6	1.4	0.99
177	2021	fert	7535	103.8	104.4	10.3	10.1	-0.5	1.5	0.99
178	2022	fert	15523	103.1	103.8	9.6	9.4	-0.7	1.8	0.98
179	2023	fert	14987	104.0	105.0	8.8	8.8	-1.0	1.7	0.98
180	2024	fert	3030	104.0	105.1	8.2	8.1	-1.2	1.5	0.98

JER sum sta for SS and prev SS breeding value for genotyped females without phenotype, by birth year

Obs	diff	d_cr	d_nrr	d_icf	d_ifl	d_ais	d_hst	d_fert
1	.	.	.	.	.	.	79242	.
2	-18	.	.	.	.	.	.	1
3	-17	.	.	1	.	.	.	1
4	-16	.	.	.	.	.	.	1
5	-14	.	.	.	.	.	.	1
6	-13	.	.	.	1	.	.	2
7	-12	.	.	1	.	.	.	3
8	-11	.	.	.	1	.	.	.
9	-10	.	1	.	.	1	.	.
10	-9	.	1	3	.	.	.	1
11	-8	.	.	1	1	.	.	1
12	-7	1	.	1	9	.	.	12
13	-6	16	2	3	42	31	.	101
14	-5	186	46	100	289	227	.	423
15	-4	1287	358	474	1178	899	.	1784
16	-3	4220	1701	1629	3199	2754	.	4970
17	-2	8276	4935	5093	5940	6039	.	10230
18	-1	9657	8477	12888	7343	8355	.	13626
19	0	6518	8360	16878	6526	7526	.	11930
20	1	2670	4866	11397	4203	3842	.	7115
21	2	666	1649	4419	1785	1192	.	2908
22	3	120	347	1120	619	184	.	873
23	4	16	49	172	149	24	.	177
24	5	4	9	19	31	4	.	37
25	6	2	1	3	7	1	.	8
26	7	1	.	2	1	1	.	2
27	8	.	.	1	.	.	.	.
28	10	.	.	1	.	.	.	.
29	11	.	.	1	.	.	.	.
30	13	.	.	.	.	.	.	1
31	15	.	.	1	.	.	.	1
32	17	.	.	1	.	.	.	.

JER sum sta for SS and prev SS breeding value for genotyped females without phenotype, by birth year

Obs	diff	p_cr	p_nrr	p_icf	p_ifl	p_ais	p_hst	p_fert
1	.	.	.	.	.	.	.	.
2	-18	.	.	.	.	.	.	0
3	-17	.	.	0	.	.	.	0
4	-16	.	.	.	.	.	.	0
5	-14	.	.	.	.	.	.	0
6	-13	.	.	.	0	.	.	0
7	-12	.	.	0	.	.	.	0
8	-11	.	.	.	0	.	.	.
9	-10	.	0	.	.	0	.	.
10	-9	.	0	0	.	.	.	0
11	-8	.	.	0	0	.	.	0
12	-7	0	.	0	0	.	.	0
13	-6	0	0	0	0	0	.	0
14	-5	1	0	0	1	1	.	1
15	-4	4	1	1	4	3	.	3
16	-3	13	6	3	10	9	.	9
17	-2	25	16	9	19	19	.	19
18	-1	29	28	24	23	27	.	25
19	0	19	27	31	21	24	.	22
20	1	8	16	21	13	12	.	13
21	2	2	5	8	6	4	.	5
22	3	0	1	2	2	1	.	2
23	4	0	0	0	0	0	.	0
24	5	0	0	0	0	0	.	0
25	6	0	0	0	0	0	.	0
26	7	0	.	0	0	0	.	0
27	8	.	.	0	.	.	.	.
28	10	.	.	0	.	.	.	.
29	11	.	.	0	.	.	.	.
30	13	.	.	.	.	.	.	0
31	15	.	.	0	.	.	.	0
32	17	.	.	0	.	.	.	.

JER sum sta for SS and previous breeding value for genotyped females with phenotype, by birth year

Obs	BYR	name	no	mean_ss	mean_oss	std_ss	std_oss	mean_dif	std_dif	corr_SS
1	2015	cr0	3802	94.2	95.4	12.8	12.8	-1.2	1.5	0.99
2	2016	cr0	4221	91.8	93.1	12.1	12.0	-1.3	1.2	1.00
3	2017	cr0	5623	95.7	96.9	12.5	12.4	-1.1	1.2	1.00
4	2018	cr0	7359	97.9	99.2	11.5	11.4	-1.4	1.2	0.99
5	2019	cr0	8626	98.1	99.4	13.3	13.2	-1.3	1.2	1.00
6	2020	cr0	10016	100.1	101.2	12.1	12.0	-1.1	1.3	0.99
7	2021	cr0	13420	107.5	109.1	12.0	12.1	-1.5	1.5	0.99
8	2022	cr0	9252	104.8	106.1	11.5	11.3	-1.3	1.8	0.99
9	2015	cr1	3421	95.2	96.4	9.7	9.8	-1.2	1.3	0.99
10	2016	cr1	3808	94.3	95.5	9.7	9.8	-1.3	1.1	0.99
11	2017	cr1	5008	96.4	97.6	10.1	10.2	-1.2	1.1	0.99
12	2018	cr1	6221	98.2	99.5	8.9	8.9	-1.3	1.1	0.99
13	2019	cr1	7335	98.8	100.0	10.6	10.8	-1.3	1.1	0.99
14	2020	cr1	8385	100.4	101.4	9.9	10.0	-1.0	1.3	0.99
15	2021	cr1	5052	107.3	108.9	10.7	10.9	-1.6	1.4	0.99
16	2022	cr1	2	.	.	.	.	.	.	1.00
17	2015	cr2	2913	95.7	96.8	10.5	10.6	-1.1	1.4	0.99
18	2016	cr2	3215	96.0	97.1	9.7	9.8	-1.1	1.1	0.99
19	2017	cr2	4113	97.3	98.4	10.4	10.4	-1.1	1.1	0.99
20	2018	cr2	5040	98.8	100.0	8.9	8.9	-1.2	1.2	0.99
21	2019	cr2	5918	99.9	101.1	10.4	10.5	-1.2	1.2	0.99
22	2020	cr2	3524	101.5	102.4	9.8	9.8	-0.8	1.2	0.99
23	2021	cr2	5	.	.	.	.	.	.	0.99
24	2015	cr3	2186	96.8	97.7	9.9	9.9	-0.9	1.4	0.99
25	2016	cr3	2399	97.6	98.4	8.8	8.9	-0.9	1.1	0.99
26	2017	cr3	2981	98.4	99.3	9.6	9.6	-0.9	1.1	0.99
27	2018	cr3	3480	99.7	100.7	8.2	8.1	-1.0	1.1	0.99
28	2019	cr3	2100	101.5	102.5	9.2	9.3	-1.1	1.3	0.99
29	2020	cr3	6	.	.	.	.	.	.	0.99
30	2015	cr	4053	95.2	96.2	10.3	10.4	-1.1	1.3	0.99
31	2016	cr	4420	95.1	96.1	9.8	9.9	-1.1	1.1	0.99
32	2017	cr	5897	96.8	97.8	10.4	10.4	-1.0	1.1	0.99
33	2018	cr	7548	98.3	99.4	8.9	8.9	-1.2	1.2	0.99
34	2019	cr	9060	98.9	100.1	10.5	10.7	-1.2	1.2	0.99
35	2020	cr	10240	100.5	101.4	9.8	9.8	-0.8	1.4	0.99
36	2021	cr	13450	106.0	107.6	10.1	10.3	-1.6	1.5	0.99
37	2022	cr	9253	103.6	104.8	9.1	9.1	-1.2	1.5	0.99

JER sum sta for SS and previous breeding value for genotyped females with phenotype, by birth year

Obs	BYR	name	no	mean_ss	mean_oss	std_ss	std_oss	mean_dif	std_dif	corr_SS
38	2015	nrr0	3709	96.9	97.9	10.9	10.9	-1.0	1.6	0.99
39	2016	nrr0	4082	95.2	96.3	10.5	10.5	-1.0	1.3	0.99
40	2017	nrr0	5456	97.6	98.4	10.8	10.8	-0.9	1.3	0.99
41	2018	nrr0	7198	99.3	100.3	10.0	10.0	-1.0	1.3	0.99
42	2019	nrr0	8420	99.1	100.0	10.8	10.9	-0.9	1.4	0.99
43	2020	nrr0	9804	99.6	100.4	10.1	9.9	-0.9	1.4	0.99
44	2021	nrr0	13046	104.8	105.4	10.1	9.9	-0.6	1.6	0.99
45	2022	nrr0	12219	101.3	102.1	9.8	9.8	-0.8	1.8	0.98
46	2023	nrr0	117	.	.	.	.	.	.	0.93
47	2015	nrr1	3333	98.2	98.8	9.2	9.1	-0.6	1.3	0.99
48	2016	nrr1	3702	97.0	97.7	8.4	8.3	-0.7	1.1	0.99
49	2017	nrr1	4886	98.6	99.2	8.7	8.6	-0.6	1.1	0.99
50	2018	nrr1	6065	99.1	99.8	7.6	7.6	-0.6	1.1	0.99
51	2019	nrr1	7136	100.0	100.8	8.8	8.9	-0.9	1.2	0.99
52	2020	nrr1	8189	100.0	100.6	8.2	8.1	-0.6	1.3	0.99
53	2021	nrr1	6778	103.8	104.0	8.3	8.0	-0.2	1.7	0.98
54	2022	nrr1	98	.	.	.	.	.	.	0.93
55	2015	nrr2	2845	99.0	99.4	10.6	10.7	-0.5	1.5	0.99
56	2016	nrr2	3151	98.5	99.1	8.6	8.6	-0.6	1.2	0.99
57	2017	nrr2	4033	100.1	100.3	10.1	9.9	-0.3	1.2	0.99
58	2018	nrr2	4912	99.4	99.9	8.0	7.9	-0.4	1.2	0.99
59	2019	nrr2	5829	101.2	101.7	9.3	9.4	-0.5	1.3	0.99
60	2020	nrr2	4850	100.7	101.2	8.9	8.7	-0.5	1.6	0.98
61	2021	nrr2	104	.	.	.	.	.	.	0.98
62	2015	nrr3	2140	99.5	99.8	8.4	8.4	-0.3	1.2	0.99
63	2016	nrr3	2351	99.4	99.7	7.0	7.1	-0.3	1.0	0.99
64	2017	nrr3	2898	100.3	100.4	8.7	8.7	-0.1	1.0	0.99
65	2018	nrr3	3446	100.0	100.4	6.9	7.0	-0.5	1.1	0.99
66	2019	nrr3	2920	101.0	101.4	8.0	8.1	-0.4	1.3	0.99
67	2020	nrr3	72	.	.	.	.	.	.	0.99
68	2015	nrr	4009	98.6	99.0	9.4	9.3	-0.4	1.3	0.99
69	2016	nrr	4358	97.8	98.3	7.9	7.9	-0.5	1.0	0.99
70	2017	nrr	5844	99.3	99.6	9.3	9.2	-0.3	1.1	0.99
71	2018	nrr	7493	99.3	99.8	7.4	7.5	-0.5	1.1	0.99
72	2019	nrr	8968	100.2	100.7	8.9	9.0	-0.5	1.2	0.99
73	2020	nrr	10177	100.2	100.7	8.2	8.1	-0.5	1.4	0.99
74	2021	nrr	13202	102.8	102.9	7.6	7.4	-0.1	1.6	0.98

JER sum sta for SS and previous breeding value for genotyped females with phenotype, by birth year

Obs	BYR	name	no	mean_ss	mean_oss	std_ss	std_oss	mean_dif	std_dif	corr_SS
75	2022	nrr	12224	101.0	101.5	7.1	6.8	-0.5	1.9	0.96
76	2023	nrr	117	.	.	.	.	.	.	0.98
77	2015	icf1	3350	98.2	98.3	8.6	8.6	-0.1	1.1	0.99
78	2016	icf1	3722	98.9	98.9	8.9	8.9	-0.1	0.9	0.99
79	2017	icf1	4913	99.2	99.3	8.1	8.1	-0.1	1.0	0.99
80	2018	icf1	6129	100.2	100.3	8.2	8.2	-0.1	1.0	0.99
81	2019	icf1	7197	99.1	99.1	8.4	8.4	-0.1	1.0	0.99
82	2020	icf1	8260	100.8	100.9	8.8	8.8	-0.1	1.1	0.99
83	2021	icf1	6795	101.8	102.0	8.0	7.7	-0.3	1.7	0.98
84	2022	icf1	32	.	.	.	.	.	.	0.95
85	2015	icf2	2873	98.7	98.7	8.7	8.8	0.0	1.2	0.99
86	2016	icf2	3166	99.1	99.1	9.0	9.1	0.0	1.0	0.99
87	2017	icf2	4066	99.7	99.7	8.7	8.7	0.0	1.0	0.99
88	2018	icf2	4969	100.6	100.8	8.5	8.6	-0.1	1.0	0.99
89	2019	icf2	5914	99.2	99.3	8.6	8.6	-0.1	1.1	0.99
90	2020	icf2	4822	101.5	101.6	9.0	9.0	-0.1	1.2	0.99
91	2021	icf2	44	.	.	.	.	.	.	0.99
92	2015	icf3	2166	98.7	98.8	8.3	8.4	-0.1	1.1	0.99
93	2016	icf3	2378	100.2	100.2	8.6	8.7	0.0	1.0	0.99
94	2017	icf3	2948	99.6	99.7	8.6	8.6	-0.2	1.1	0.99
95	2018	icf3	3502	101.3	101.3	8.3	8.4	0.0	1.1	0.99
96	2019	icf3	2889	100.5	100.7	8.0	7.9	-0.2	1.4	0.99
97	2020	icf3	44	.	.	.	.	.	.	0.99
98	2015	icf	3511	98.2	98.3	8.3	8.3	-0.1	1.1	0.99
99	2016	icf	3889	99.1	99.1	8.8	8.8	0.0	0.9	0.99
100	2017	icf	5125	99.2	99.3	8.3	8.3	-0.1	1.0	0.99
101	2018	icf	6349	100.5	100.6	8.1	8.1	-0.1	1.0	0.99
102	2019	icf	7524	99.0	99.1	8.3	8.3	-0.1	1.1	0.99
103	2020	icf	8443	100.9	101.0	8.7	8.7	-0.1	1.2	0.99
104	2021	icf	6799	101.6	101.8	7.9	7.6	-0.2	1.6	0.98
105	2022	icf	32	.	.	.	.	.	.	0.96
106	2015	ifl0	3611	96.4	97.4	11.5	11.4	-1.0	1.6	0.99
107	2016	ifl0	3953	95.1	96.0	10.9	10.8	-1.0	1.3	0.99
108	2017	ifl0	5312	97.2	98.0	10.8	10.8	-0.8	1.3	0.99
109	2018	ifl0	7054	99.3	100.3	10.6	10.6	-1.0	1.3	0.99
110	2019	ifl0	8222	99.0	99.6	11.6	11.7	-0.7	1.4	0.99
111	2020	ifl0	9597	100.1	100.9	11.3	11.3	-0.8	1.5	0.99

JER sum sta for SS and previous breeding value for genotyped females with phenotype, by birth year

Obs	BYR	name	no	mean_ss	mean_oss	std_ss	std_oss	mean_dif	std_dif	corr_SS
112	2021	ifl0	12781	105.2	105.9	10.5	10.4	-0.7	1.6	0.99
113	2022	ifl0	11983	102.6	103.3	10.2	10.1	-0.7	2.0	0.98
114	2023	ifl0	116	.	.	.	.	.	.	0.94
115	2015	ifl1	3332	97.1	97.9	9.5	9.5	-0.7	1.4	0.99
116	2016	ifl1	3702	95.8	96.7	10.5	10.4	-0.9	1.3	0.99
117	2017	ifl1	4881	98.1	98.8	9.8	9.7	-0.7	1.3	0.99
118	2018	ifl1	6092	99.8	100.6	9.6	9.6	-0.8	1.3	0.99
119	2019	ifl1	7164	99.0	100.0	10.2	10.3	-0.9	1.4	0.99
120	2020	ifl1	8208	101.0	101.7	10.6	10.6	-0.7	1.5	0.99
121	2021	ifl1	6833	105.4	105.9	10.0	9.6	-0.5	1.9	0.98
122	2022	ifl1	98	.	.	.	.	.	.	0.97
123	2015	ifl2	2857	98.2	98.8	9.9	10.0	-0.6	1.5	0.99
124	2016	ifl2	3148	98.0	98.7	10.3	10.3	-0.7	1.3	0.99
125	2017	ifl2	4038	99.3	99.7	10.3	10.3	-0.4	1.3	0.99
126	2018	ifl2	4953	100.7	101.5	9.5	9.6	-0.8	1.4	0.99
127	2019	ifl2	5881	100.2	100.9	10.3	10.6	-0.7	1.5	0.99
128	2020	ifl2	4892	102.0	102.7	10.3	10.5	-0.7	1.7	0.99
129	2021	ifl2	107	.	.	.	.	.	.	0.98
130	2015	ifl3	2157	98.9	99.5	10.2	10.4	-0.6	1.5	0.99
131	2016	ifl3	2369	99.8	100.3	9.9	10.0	-0.5	1.3	0.99
132	2017	ifl3	2938	99.7	100.2	10.3	10.3	-0.5	1.4	0.99
133	2018	ifl3	3490	101.8	102.4	9.5	9.5	-0.6	1.4	0.99
134	2019	ifl3	2964	101.8	102.5	10.0	10.2	-0.7	1.8	0.98
135	2020	ifl3	75	.	.	.	.	.	.	0.98
136	2015	ifl	3998	97.4	98.1	9.9	9.9	-0.7	1.4	0.99
137	2016	ifl	4323	97.1	97.7	10.5	10.6	-0.7	1.3	0.99
138	2017	ifl	5810	98.4	98.9	10.3	10.2	-0.5	1.3	0.99
139	2018	ifl	7455	100.1	100.8	9.5	9.6	-0.7	1.3	0.99
140	2019	ifl	8910	99.0	99.8	10.4	10.6	-0.8	1.5	0.99
141	2020	ifl	10123	101.1	101.7	10.4	10.4	-0.6	1.7	0.99
142	2021	ifl	13002	104.1	104.5	9.9	9.6	-0.4	1.9	0.98
143	2022	ifl	11988	103.4	104.0	9.7	9.3	-0.6	2.1	0.98
144	2023	ifl	116	.	.	.	.	.	.	0.97
145	2015	ais0	3616	97.4	98.5	11.5	11.3	-1.2	1.6	0.99
146	2016	ais0	3991	95.0	96.2	10.8	10.8	-1.2	1.4	0.99
147	2017	ais0	5310	97.8	98.9	11.4	11.3	-1.0	1.4	0.99
148	2018	ais0	7022	98.6	99.9	10.8	10.6	-1.3	1.4	0.99

JER sum sta for SS and previous breeding value for genotyped females with phenotype, by birth year

Obs	BYR	name	no	mean_ss	mean_oss	std_ss	std_oss	mean_dif	std_dif	corr_SS
149	2019	ais0	8145	99.0	100.0	12.3	12.2	-1.0	1.4	0.99
150	2020	ais0	9489	99.6	100.4	11.1	11.0	-0.8	1.5	0.99
151	2021	ais0	12813	105.4	106.1	11.0	10.9	-0.7	1.5	0.99
152	2022	ais0	12190	101.3	102.0	11.3	11.2	-0.7	1.9	0.99
153	2023	ais0	117	.	.	.	.	.	.	0.95
154	2015	ais1	3302	98.1	98.8	9.2	9.1	-0.7	1.3	0.99
155	2016	ais1	3679	96.7	97.5	9.3	9.2	-0.8	1.2	0.99
156	2017	ais1	4852	98.5	99.2	9.4	9.3	-0.8	1.2	0.99
157	2018	ais1	6036	99.3	100.2	8.5	8.4	-0.9	1.1	0.99
158	2019	ais1	7096	99.2	100.1	9.7	9.7	-0.9	1.2	0.99
159	2020	ais1	8149	100.0	100.8	9.1	9.1	-0.8	1.3	0.99
160	2021	ais1	6533	104.9	105.6	9.3	9.1	-0.7	1.4	0.99
161	2022	ais1	26	.	.	.	.	.	.	0.98
162	2015	ais2	2823	98.9	99.5	10.2	10.2	-0.6	1.5	0.99
163	2016	ais2	3122	98.5	99.1	9.3	9.3	-0.6	1.1	0.99
164	2017	ais2	4012	99.8	100.2	10.1	10.0	-0.4	1.2	0.99
165	2018	ais2	4883	100.1	100.8	8.6	8.6	-0.7	1.2	0.99
166	2019	ais2	5798	100.6	101.2	10.1	10.2	-0.6	1.3	0.99
167	2020	ais2	4646	101.0	101.5	9.3	9.2	-0.5	1.5	0.99
168	2021	ais2	41	.	.	.	.	.	.	0.99
169	2015	ais3	2125	99.5	99.9	9.4	9.5	-0.4	1.3	0.99
170	2016	ais3	2334	99.6	99.9	8.3	8.4	-0.3	1.1	0.99
171	2017	ais3	2882	100.1	100.4	9.1	9.0	-0.3	1.2	0.99
172	2018	ais3	3437	100.9	101.5	8.0	7.9	-0.6	1.2	0.99
173	2019	ais3	2791	101.3	101.9	9.0	9.0	-0.6	1.4	0.99
174	2020	ais3	39	.	.	.	.	.	.	0.98
175	2015	ais	3992	98.4	99.0	9.5	9.4	-0.6	1.3	0.99
176	2016	ais	4342	97.7	98.2	8.9	8.9	-0.5	1.1	0.99
177	2017	ais	5829	99.0	99.4	9.4	9.3	-0.4	1.1	0.99
178	2018	ais	7460	99.8	100.4	8.2	8.2	-0.7	1.1	0.99
179	2019	ais	8891	99.5	100.2	9.7	9.7	-0.7	1.3	0.99
180	2020	ais	10105	100.1	100.7	8.7	8.7	-0.6	1.4	0.99
181	2021	ais	13074	103.6	104.3	8.7	8.6	-0.7	1.5	0.99
182	2022	ais	12192	101.6	102.2	8.1	8.1	-0.6	1.5	0.98
183	2023	ais	117	.	.	.	.	.	.	0.98
184	2015	fert	3511	97.3	98.1	10.2	10.2	-0.7	1.3	0.99
185	2016	fert	3889	96.9	97.7	10.4	10.5	-0.7	1.2	0.99

JER sum sta for SS and previous breeding value for genotyped females with phenotype, by birth year

Obs	BYR	name	no	mean_ss	mean_oss	std_ss	std_oss	mean_dif	std_dif	corr_SS
186	2017	fert	5125	98.3	98.9	10.3	10.3	-0.6	1.2	0.99
187	2018	fert	6349	100.2	101.0	9.5	9.5	-0.8	1.2	0.99
188	2019	fert	7524	99.3	100.0	10.5	10.7	-0.8	1.4	0.99
189	2020	fert	8443	101.0	101.7	10.3	10.4	-0.7	1.5	0.99
190	2021	fert	6799	105.0	105.6	9.8	9.6	-0.6	1.7	0.98
191	2022	fert	32	.	.	.	.	.	.	0.97

JER sum sta for SS and previous breeding value for genotyped females with phenotype, by birth year

Obs	diff	d_cr	d_nrr	d_icf	d_ifl	d_ais	d_hst	d_fert
1	-25	1	.	.	.	.	.	.
2	-22	.	1	.	.	.	.	.
3	-21	1	1	.	.	.	.	.
4	-20	.	.	.	.	1	.	.
5	-19	.	.	1	.	2	.	.
6	-18	.	1	1	3	.	.	.
7	-17	.	.	.	1	1	.	1
8	-16	1	1	1	2	1	.	2
9	-15	2	2	.	1	1	.	.
10	-14	3	.	.	4	1	.	.
11	-13	2	2	.	3	3	.	1
12	-12	4	1	1	6	3	.	4
13	-11	5	4	1	2	3	.	.
14	-10	3	.	1	2	2	.	3
15	-9	7	5	4	8	5	.	2
16	-8	7	4	4	17	4	.	8
17	-7	4	5	3	27	14	.	11
18	-6	36	33	12	115	35	.	27
19	-5	361	171	33	415	163	.	119
20	-4	2005	949	193	1727	798	.	596
21	-3	6965	3131	735	5084	3514	.	2673
22	-2	15457	8856	2935	11342	10742	.	7667
23	-1	20073	17533	10298	16315	19589	.	12377
24	0	13223	19265	15889	15152	19041	.	10881
25	1	4561	11127	9012	9319	9186	.	5281
26	2	963	4074	2142	4079	2341	.	1617
27	3	158	971	320	1436	443	.	303
28	4	31	193	50	447	58	.	55
29	5	15	34	14	136	16	.	8
30	6	8	6	6	35	11	.	9
31	7	4	7	6	17	8	.	5
32	8	6	4	3	7	5	.	5
33	9	4	2	3	5	3	.	6
34	10	4	3	.	8	4	.	3
35	11	3	1	.	3	.	.	3
36	12	1	2	2	1	1	.	1
37	13	1	.	1	1	.	.	1

JER sum sta for SS and previous breeding value for genotyped females with phenotype, by birth year

Obs	diff	d_cr	d_nrr	d_icf	d_ifl	d_ais	d_hst	d_fert
38	14	.	.	1	1	1	.	1
39	15	1	1	.	2	.	.	1
40	17	.	1	.	.	.	.	.
41	18	.	.	.	1	1	.	1
42	19	.	.	.	1	1	.	.
43	20	1	.	.	.	.	.	.
44	21	.	1	.	.	.	.	.

JER sum sta for SS and previous breeding value for genotyped females with phenotype, by birth year

Obs	diff	p_cr	p_nrr	p_icf	p_ifl	p_ais	p_hst	p_fert
1	-25	0	.	.	.	.	.	.
2	-22	.	0	.	.	.	.	.
3	-21	0	0	.	.	.	.	.
4	-20	.	.	.	.	0	.	.
5	-19	.	.	0	.	0	.	.
6	-18	.	0	0	0	.	.	.
7	-17	.	.	.	0	0	.	0
8	-16	0	0	0	0	0	.	0
9	-15	0	0	.	0	0	.	.
10	-14	0	.	.	0	0	.	.
11	-13	0	0	.	0	0	.	0
12	-12	0	0	0	0	0	.	0
13	-11	0	0	0	0	0	.	.
14	-10	0	.	0	0	0	.	0
15	-9	0	0	0	0	0	.	0
16	-8	0	0	0	0	0	.	0
17	-7	0	0	0	0	0	.	0
18	-6	0	0	0	0	0	.	0
19	-5	1	0	0	1	0	.	0
20	-4	3	1	0	3	1	.	1
21	-3	11	5	2	8	5	.	6
22	-2	24	13	7	17	16	.	18
23	-1	31	26	25	25	30	.	30
24	0	21	29	38	23	29	.	26
25	1	7	17	22	14	14	.	13
26	2	2	6	5	6	4	.	4
27	3	0	1	1	2	1	.	1
28	4	0	0	0	1	0	.	0
29	5	0	0	0	0	0	.	0
30	6	0	0	0	0	0	.	0
31	7	0	0	0	0	0	.	0
32	8	0	0	0	0	0	.	0
33	9	0	0	0	0	0	.	0
34	10	0	0	.	0	0	.	0
35	11	0	0	.	0	.	.	0
36	12	0	0	0	0	0	.	0
37	13	0	.	0	0	.	.	0

JER sum sta for SS and previous breeding value for genotyped females with phenotype, by birth year

Obs	diff	p_cr	p_nrr	p_icf	p_ifl	p_ais	p_hst	p_fert
38	14	.	.	0	0	0	.	0
39	15	0	0	.	0	.	.	0
40	17	.	0	.	.	.	.	.
41	18	.	.	.	0	0	.	0
42	19	.	.	.	0	0	.	.
43	20	0	.	.	.	.	.	.
44	21	.	0	.	.	.	.	.

JER summery stastistics for SS and previous breeding value for nongenotyped females with phenotype, by birth year

Obs	BYR	name	no	mean_ss	mean_oss	std_ss	std_oss	mean_dif	std_dif	corr_SS
1	2015	cr0	17242	93.3	94.5	10.5	10.5	-1.2	0.6	1.00
2	2016	cr0	16078	91.1	92.4	9.8	9.7	-1.3	0.7	1.00
3	2017	cr0	15130	93.6	94.8	10.2	10.1	-1.2	0.7	1.00
4	2018	cr0	16260	96.7	98.1	9.1	9.0	-1.3	0.7	1.00
5	2019	cr0	16368	97.0	98.2	11.0	10.9	-1.2	0.8	1.00
6	2020	cr0	17452	98.2	99.3	9.7	9.7	-1.1	0.9	1.00
7	2021	cr0	22226	104.7	106.1	10.4	10.6	-1.5	1.1	0.99
8	2022	cr0	14106	104.0	105.3	9.2	9.2	-1.3	1.4	0.99
9	2023	cr0	1	.	.	.	.	.	.	.
10	2015	cr1	16759	94.1	95.2	7.4	7.4	-1.2	0.6	1.00
11	2016	cr1	15398	93.2	94.5	7.1	7.2	-1.3	0.6	1.00
12	2017	cr1	14346	94.9	96.1	7.7	7.7	-1.2	0.6	1.00
13	2018	cr1	15128	96.7	98.0	6.4	6.4	-1.3	0.7	0.99
14	2019	cr1	14513	96.8	98.1	8.2	8.4	-1.2	0.9	0.99
15	2020	cr1	15212	98.5	99.6	7.3	7.4	-1.0	1.0	0.99
16	2021	cr1	8740	104.4	106.0	9.0	9.3	-1.6	1.1	0.99
17	2015	cr2	12881	94.7	95.8	8.4	8.4	-1.1	0.6	1.00
18	2016	cr2	11978	94.6	95.8	7.4	7.4	-1.1	0.6	1.00
19	2017	cr2	11080	95.9	97.0	8.1	8.1	-1.1	0.7	1.00
20	2018	cr2	11580	97.2	98.4	6.5	6.5	-1.2	0.8	0.99
21	2019	cr2	10918	97.7	98.9	8.3	8.4	-1.1	1.0	0.99
22	2020	cr2	5819	99.6	100.5	7.3	7.3	-0.9	1.0	0.99
23	2021	cr2	4	.	.	.	.	.	.	0.97
24	2015	cr3	8649	95.7	96.6	7.9	7.9	-0.8	0.6	1.00
25	2016	cr3	8154	96.2	97.0	6.9	6.9	-0.9	0.6	1.00
26	2017	cr3	7230	97.0	97.8	7.7	7.6	-0.9	0.7	1.00
27	2018	cr3	7657	98.1	99.1	6.2	6.2	-1.0	0.8	0.99
28	2019	cr3	3763	99.1	100.1	7.5	7.6	-1.1	1.0	0.99
29	2020	cr3	10	.	.	.	.	.	.	0.99
30	2015	cr	19745	94.1	95.1	8.1	8.1	-1.0	0.6	1.00
31	2016	cr	18005	94.0	95.1	7.2	7.2	-1.1	0.6	1.00
32	2017	cr	17007	95.3	96.4	7.9	7.9	-1.1	0.7	1.00
33	2018	cr	18021	96.8	97.9	6.4	6.4	-1.2	0.8	0.99
34	2019	cr	17697	97.0	98.1	8.2	8.4	-1.1	1.0	0.99
35	2020	cr	18401	98.7	99.6	7.2	7.2	-0.9	1.1	0.99
36	2021	cr	22594	103.6	105.1	8.4	8.6	-1.6	1.3	0.99

JER summery stastistics for SS and previous breeding value for nongenotyped females with phenotype, by birth year

Obs	BYR	name	no	mean_ss	mean_oss	std_ss	std_oss	mean_dif	std_dif	corr_SS
37	2022	cr	14106	102.5	103.8	6.8	6.8	-1.3	1.2	0.98
38	2023	cr	1	.	.	.	.	.	.	.
39	2015	nrr0	16756	96.5	97.5	8.6	8.7	-1.0	0.7	1.00
40	2016	nrr0	15613	94.8	95.8	8.2	8.3	-1.0	0.8	1.00
41	2017	nrr0	14724	95.9	96.8	8.6	8.6	-0.9	0.7	1.00
42	2018	nrr0	15838	98.6	99.5	7.6	7.7	-1.0	0.8	0.99
43	2019	nrr0	15989	98.5	99.4	8.6	8.7	-0.9	0.9	1.00
44	2020	nrr0	17056	98.3	99.2	7.6	7.5	-0.9	0.9	0.99
45	2021	nrr0	21639	102.9	103.5	8.1	7.9	-0.6	1.1	0.99
46	2022	nrr0	19011	101.0	101.8	7.5	7.5	-0.8	1.4	0.98
47	2023	nrr0	162	.	.	.	.	.	.	0.91
48	2015	nrr1	16325	97.6	98.1	7.3	7.3	-0.6	0.6	1.00
49	2016	nrr1	15023	96.5	97.1	6.4	6.3	-0.7	0.6	0.99
50	2017	nrr1	13961	97.6	98.2	6.8	6.7	-0.6	0.7	0.99
51	2018	nrr1	14716	98.1	98.7	5.7	5.8	-0.6	0.7	0.99
52	2019	nrr1	14144	98.6	99.4	7.0	7.2	-0.8	0.9	0.99
53	2020	nrr1	14814	98.9	99.5	6.2	6.3	-0.6	1.1	0.99
54	2021	nrr1	11453	102.2	102.4	6.9	6.6	-0.2	1.4	0.98
55	2022	nrr1	216	.	.	.	.	.	.	0.93
56	2015	nrr2	12508	98.7	99.1	9.0	9.0	-0.4	0.7	1.00
57	2016	nrr2	11718	97.9	98.4	6.9	7.0	-0.5	0.7	0.99
58	2017	nrr2	10811	99.2	99.5	8.6	8.5	-0.3	0.8	1.00
59	2018	nrr2	11322	98.4	98.8	6.3	6.3	-0.4	0.8	0.99
60	2019	nrr2	10738	99.7	100.2	7.9	7.9	-0.5	1.1	0.99
61	2020	nrr2	8096	99.8	100.3	7.3	7.1	-0.5	1.3	0.98
62	2021	nrr2	227	.	.	.	.	.	.	0.98
63	2015	nrr3	8434	99.0	99.3	7.0	7.0	-0.2	0.6	1.00
64	2016	nrr3	7942	98.7	98.9	5.8	5.9	-0.3	0.7	0.99
65	2017	nrr3	7032	99.5	99.6	7.5	7.5	-0.1	0.8	1.00
66	2018	nrr3	7515	99.1	99.5	5.7	5.8	-0.4	0.8	0.99
67	2019	nrr3	4990	99.7	100.1	6.9	6.9	-0.4	1.1	0.99
68	2020	nrr3	143	.	.	.	.	.	.	0.99
69	2015	nrr	19506	98.0	98.4	7.7	7.7	-0.4	0.6	1.00
70	2016	nrr	17822	97.3	97.8	6.2	6.2	-0.5	0.6	0.99
71	2017	nrr	16800	98.4	98.8	7.7	7.6	-0.3	0.7	1.00
72	2018	nrr	17863	98.2	98.7	5.7	5.8	-0.5	0.8	0.99

JER summery stastistics for SS and previous breeding value for nongenotyped females with phenotype, by birth year

Obs	BYR	name	no	mean_ss	mean_oss	std_ss	std_oss	mean_dif	std_dif	corr_SS
73	2019	nrr	17548	98.9	99.4	7.4	7.5	-0.5	1.0	0.99
74	2020	nrr	18314	99.2	99.7	6.7	6.6	-0.5	1.2	0.98
75	2021	nrr	22358	101.6	101.7	6.4	6.2	-0.1	1.3	0.98
76	2022	nrr	19023	100.5	100.8	5.4	5.0	-0.4	1.6	0.95
77	2023	nrr	162	.	.	.	.	.	.	0.97
78	2015	icf1	16476	98.2	98.3	6.6	6.6	-0.1	0.6	1.00
79	2016	icf1	15138	98.6	98.7	6.9	6.9	-0.1	0.6	1.00
80	2017	icf1	14073	99.2	99.4	6.3	6.2	-0.1	0.6	0.99
81	2018	icf1	14835	99.8	99.9	6.0	6.0	-0.2	0.7	0.99
82	2019	icf1	14278	98.6	98.7	6.3	6.3	-0.1	0.8	0.99
83	2020	icf1	14954	100.1	100.2	6.8	6.9	-0.2	0.9	0.99
84	2021	icf1	11474	100.9	101.3	6.3	6.0	-0.4	1.5	0.97
85	2022	icf1	55	.	.	.	.	.	.	0.90
86	2015	icf2	12689	98.7	98.7	6.7	6.7	0.0	0.6	1.00
87	2016	icf2	11860	98.9	98.9	7.2	7.2	0.0	0.6	1.00
88	2017	icf2	10954	99.6	99.7	6.7	6.7	0.0	0.7	1.00
89	2018	icf2	11478	100.3	100.5	6.4	6.5	-0.1	0.7	0.99
90	2019	icf2	10886	98.7	98.8	6.5	6.5	-0.1	0.9	0.99
91	2020	icf2	7957	100.6	100.7	7.1	7.2	-0.1	1.0	0.99
92	2021	icf2	81	.	.	.	.	.	.	0.98
93	2015	icf3	8594	98.6	98.7	6.4	6.4	-0.1	0.7	0.99
94	2016	icf3	8094	99.9	99.9	6.7	6.8	0.0	0.7	1.00
95	2017	icf3	7195	99.5	99.6	6.8	6.9	-0.2	0.7	0.99
96	2018	icf3	7680	101.0	101.0	6.0	6.1	0.0	0.8	0.99
97	2019	icf3	4955	99.7	99.8	5.9	5.9	-0.2	1.1	0.98
98	2020	icf3	88	.	.	.	.	.	.	0.98
99	2015	icf	16934	98.2	98.2	6.2	6.3	-0.1	0.6	1.00
100	2016	icf	15581	98.8	98.9	6.8	6.8	0.0	0.6	1.00
101	2017	icf	14475	99.1	99.2	6.4	6.4	-0.1	0.6	0.99
102	2018	icf	15225	100.1	100.3	5.9	6.0	-0.1	0.7	0.99
103	2019	icf	14595	98.6	98.7	6.1	6.1	-0.1	0.9	0.99
104	2020	icf	15138	100.1	100.2	6.8	6.8	-0.1	1.0	0.99
105	2021	icf	11477	100.8	101.1	6.1	5.8	-0.3	1.4	0.97
106	2022	icf	55	.	.	.	.	.	.	0.92
107	2015	ifl0	16308	95.9	96.9	9.2	9.2	-1.0	0.7	1.00
108	2016	ifl0	15226	94.5	95.5	8.6	8.6	-0.9	0.8	1.00

JER summery stastistics for SS and previous breeding value for nongenotyped females with phenotype, by birth year

Obs	BYR	name	no	mean_ss	mean_oss	std_ss	std_oss	mean_dif	std_dif	corr_SS
109	2017	ifl0	14347	95.7	96.5	8.8	8.8	-0.8	0.8	1.00
110	2018	ifl0	15492	98.5	99.4	8.3	8.3	-0.9	0.8	1.00
111	2019	ifl0	15660	98.2	98.9	9.5	9.6	-0.7	0.9	1.00
112	2020	ifl0	16716	98.7	99.6	9.2	9.1	-0.9	1.0	0.99
113	2021	ifl0	21219	103.0	103.7	8.8	8.7	-0.7	1.2	0.99
114	2022	ifl0	18688	102.1	102.8	7.9	7.9	-0.7	1.6	0.98
115	2023	ifl0	162	.	.	.	.	.	.	0.91
116	2015	ifl1	16356	96.2	97.0	7.0	7.0	-0.7	0.7	1.00
117	2016	ifl1	15013	95.1	95.9	7.8	7.8	-0.8	0.7	1.00
118	2017	ifl1	13965	97.0	97.7	7.1	7.0	-0.7	0.8	0.99
119	2018	ifl1	14743	98.4	99.2	7.0	7.0	-0.8	0.8	0.99
120	2019	ifl1	14191	97.4	98.3	7.6	7.7	-0.9	1.0	0.99
121	2020	ifl1	14846	99.2	100.0	7.9	7.9	-0.8	1.2	0.99
122	2021	ifl1	11551	103.0	103.6	8.2	7.7	-0.6	1.6	0.98
123	2022	ifl1	222	.	.	.	.	.	.	0.96
124	2015	ifl2	12621	97.5	98.1	7.6	7.6	-0.6	0.7	1.00
125	2016	ifl2	11806	97.1	97.8	7.9	7.9	-0.7	0.7	1.00
126	2017	ifl2	10917	98.3	98.8	8.0	8.0	-0.4	0.9	0.99
127	2018	ifl2	11429	99.4	100.1	7.1	7.1	-0.8	0.9	0.99
128	2019	ifl2	10833	98.2	98.9	8.2	8.4	-0.7	1.3	0.99
129	2020	ifl2	8189	100.4	101.1	7.8	7.8	-0.7	1.5	0.98
130	2021	ifl2	229	.	.	.	.	.	.	0.96
131	2015	ifl3	8537	98.1	98.7	8.0	8.0	-0.5	0.8	1.00
132	2016	ifl3	8050	98.7	99.2	7.8	7.8	-0.5	0.8	0.99
133	2017	ifl3	7161	98.8	99.3	8.3	8.3	-0.5	0.9	0.99
134	2018	ifl3	7637	100.4	100.9	7.2	7.2	-0.6	1.0	0.99
135	2019	ifl3	5095	99.6	100.3	8.1	8.3	-0.7	1.6	0.98
136	2020	ifl3	149	.	.	.	.	.	.	0.97
137	2015	ifl	19400	96.6	97.2	7.4	7.4	-0.6	0.7	1.00
138	2016	ifl	17725	96.3	97.0	7.8	7.8	-0.7	0.7	1.00
139	2017	ifl	16703	97.4	98.0	7.8	7.8	-0.6	0.8	0.99
140	2018	ifl	17759	98.9	99.6	7.0	7.0	-0.7	0.9	0.99
141	2019	ifl	17434	97.4	98.1	7.9	8.2	-0.7	1.2	0.99
142	2020	ifl	18225	99.4	100.0	7.8	7.8	-0.7	1.5	0.98
143	2021	ifl	22046	102.0	102.5	7.7	7.3	-0.4	1.7	0.98
144	2022	ifl	18700	102.3	102.9	7.3	6.7	-0.6	1.9	0.97

JER summery stastistics for SS and previous breeding value for nongenotyped females with phenotype, by birth year

Obs	BYR	name	no	mean_ss	mean_oss	std_ss	std_oss	mean_dif	std_dif	corr_SS
145	2023	ifl	162	.	.	.	.	.	.	0.97
146	2015	ais0	16037	96.8	98.0	8.7	8.7	-1.2	0.7	1.00
147	2016	ais0	14908	94.7	95.8	8.3	8.3	-1.2	0.8	1.00
148	2017	ais0	13906	96.3	97.4	8.8	8.8	-1.1	0.8	1.00
149	2018	ais0	15087	97.9	99.2	8.0	8.0	-1.3	0.8	1.00
150	2019	ais0	15084	98.4	99.3	9.8	9.8	-1.0	0.9	1.00
151	2020	ais0	16188	98.3	99.2	8.4	8.3	-0.9	1.0	0.99
152	2021	ais0	20885	103.3	104.1	8.8	8.7	-0.8	1.0	0.99
153	2022	ais0	18862	101.1	101.8	8.6	8.6	-0.8	1.3	0.99
154	2023	ais0	162	.	.	.	.	.	.	0.92
155	2015	ais1	16170	97.6	98.3	7.0	7.0	-0.7	0.6	1.00
156	2016	ais1	14920	96.3	97.1	7.0	6.9	-0.8	0.6	1.00
157	2017	ais1	13823	97.6	98.4	7.1	7.1	-0.8	0.7	1.00
158	2018	ais1	14652	98.3	99.1	6.1	6.1	-0.9	0.7	0.99
159	2019	ais1	14081	97.9	98.8	7.4	7.5	-0.9	0.8	0.99
160	2020	ais1	14744	98.8	99.6	6.8	6.7	-0.8	1.0	0.99
161	2021	ais1	10988	103.0	103.7	7.6	7.5	-0.7	1.0	0.99
162	2022	ais1	36	.	.	.	.	.	.	0.95
163	2015	ais2	12425	98.6	99.1	8.1	8.1	-0.5	0.7	1.00
164	2016	ais2	11640	97.9	98.5	7.2	7.2	-0.6	0.7	1.00
165	2017	ais2	10758	99.0	99.4	8.1	8.0	-0.4	0.7	1.00
166	2018	ais2	11268	99.1	99.8	6.5	6.4	-0.7	0.8	0.99
167	2019	ais2	10693	99.0	99.6	8.3	8.3	-0.6	1.0	0.99
168	2020	ais2	7640	99.9	100.4	7.1	7.0	-0.5	1.2	0.99
169	2021	ais2	75	.	.	.	.	.	.	0.98
170	2015	ais3	8374	99.0	99.4	7.6	7.6	-0.4	0.7	1.00
171	2016	ais3	7906	98.9	99.2	6.7	6.7	-0.3	0.7	0.99
172	2017	ais3	7000	99.2	99.5	7.4	7.3	-0.3	0.8	0.99
173	2018	ais3	7494	99.9	100.5	6.3	6.3	-0.6	0.9	0.99
174	2019	ais3	4720	100.0	100.5	7.5	7.5	-0.6	1.2	0.99
175	2020	ais3	71	.	.	.	.	.	.	0.98
176	2015	ais	19325	97.9	98.4	7.4	7.4	-0.5	0.6	1.00
177	2016	ais	17690	97.3	97.8	6.6	6.7	-0.5	0.6	1.00
178	2017	ais	16637	98.2	98.7	7.3	7.3	-0.5	0.7	1.00
179	2018	ais	17734	98.8	99.5	6.0	6.0	-0.7	0.7	0.99
180	2019	ais	17388	98.3	99.0	7.7	7.7	-0.6	1.0	0.99

JER summery stastistics for SS and previous breeding value for nongenotyped females with phenotype, by birth year

Obs	BYR	name	no	mean_ss	mean_oss	std_ss	std_oss	mean_dif	std_dif	corr_SS
181	2020	ais	18139	99.0	99.5	6.5	6.5	-0.5	1.1	0.98
182	2021	ais	21927	102.1	102.8	6.9	6.9	-0.7	1.2	0.98
183	2022	ais	18868	101.1	101.6	6.0	5.9	-0.5	1.2	0.98
184	2023	ais	162	.	.	.	.	.	.	0.96
185	2015	fert	16934	96.5	97.2	7.6	7.7	-0.7	0.7	1.00
186	2016	fert	15581	96.1	96.9	7.9	7.9	-0.7	0.7	1.00
187	2017	fert	14475	97.2	97.9	7.8	7.8	-0.6	0.7	1.00
188	2018	fert	15225	98.8	99.6	7.1	7.1	-0.8	0.8	0.99
189	2019	fert	14595	97.6	98.3	8.1	8.3	-0.8	1.1	0.99
190	2020	fert	15138	99.3	100.0	7.7	7.7	-0.7	1.3	0.99
191	2021	fert	11477	102.8	103.4	7.9	7.7	-0.6	1.4	0.98
192	2022	fert	55	.	.	.	.	.	.	0.96

JER summery stastistics for SS and previous breeding value for nongenotyped females with phenotype, by birth year

Obs	diff	d_cr	d_nrr	d_icf	d_ifl	d_ais	d_hst	d_fert
1	-17	.	.	.	1	.	.	.
2	-16	1	.	.	.	.	.	.
3	-15	.	.	.	.	1	.	.
4	-13	.	2	.	.	.	.	.
5	-12	.	.	1	1	.	.	.
6	-11	1	.	.	.	.	.	.
7	-10	.	1	.	4	2	.	1
8	-9	2	1	.	16	1	.	2
9	-8	4	.	2	45	4	.	8
10	-7	12	6	9	92	26	.	42
11	-6	83	33	47	250	64	.	97
12	-5	319	164	105	502	206	.	271
13	-4	1588	890	266	1485	659	.	607
14	-3	8568	3396	1199	5578	3393	.	2194
15	-2	31853	11496	3027	18311	12677	.	11771
16	-1	75962	49002	19653	56332	61253	.	47989
17	0	22847	61029	62344	44851	56888	.	32571
18	1	3469	18380	14852	14258	10664	.	6559
19	2	688	3812	1577	4368	1578	.	1101
20	3	120	1049	306	1395	355	.	171
21	4	31	110	67	533	73	.	58
22	5	16	18	14	87	15	.	22
23	6	8	5	9	24	7	.	8
24	7	4	.	2	12	3	.	6
25	8	.	1	.	7	.	.	1
26	9	.	1	.	1	.	.	1
27	10	1	.	.	.	.	.	.
28	11	.	.	.	1	1	.	.

JER summery stastistics for SS and previous breeding value for nongenotyped females with phenotype, by birth year

Obs	diff	p_cr	p_nrr	p_icf	p_ifl	p_ais	p_hst	p_fert
1	-17	.	.	.	0	.	.	.
2	-16	0	.	.	.	.	.	.
3	-15	.	.	.	.	0	.	.
4	-13	.	0	.	.	.	.	.
5	-12	.	.	0	0	.	.	.
6	-11	0	.	.	.	.	.	.
7	-10	.	0	.	0	0	.	0
8	-9	0	0	.	0	0	.	0
9	-8	0	.	0	0	0	.	0
10	-7	0	0	0	0	0	.	0
11	-6	0	0	0	0	0	.	0
12	-5	0	0	0	0	0	.	0
13	-4	1	1	0	1	0	.	1
14	-3	6	2	1	4	2	.	2
15	-2	22	8	3	12	9	.	11
16	-1	52	33	19	38	41	.	46
17	0	16	41	60	30	38	.	31
18	1	2	12	14	10	7	.	6
19	2	0	3	2	3	1	.	1
20	3	0	1	0	1	0	.	0
21	4	0	0	0	0	0	.	0
22	5	0	0	0	0	0	.	0
23	6	0	0	0	0	0	.	0
24	7	0	.	0	0	0	.	0
25	8	.	0	.	0	.	.	0
26	9	.	0	.	0	.	.	0
27	10	0	.	.	.	.	.	.
28	11	.	.	.	0	0	.	.

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

Obs	BYR	name	no	mean_noff	std_noff	mean_ss	mean_oss	std_ss	std_oss	mean_dif	std_dif	corr_SS
1	2010	cr0	55	182	195	87.4	88.7	13.2	13.2	-1.3	0.8	1.00
2	2011	cr0	47	155	180	87.0	88.2	14.8	15.1	-1.2	0.9	1.00
3	2012	cr0	47	322	614	90.3	91.7	15.0	14.8	-1.3	0.8	1.00
4	2013	cr0	50	237	478	92.6	93.7	12.0	12.1	-1.1	0.9	1.00
5	2014	cr0	36	417	545	93.8	95.2	14.3	14.3	-1.4	0.8	1.00
6	2015	cr0	30	1057	1079	101.5	102.7	17.5	17.0	-1.3	0.9	1.00
7	2016	cr0	26	715	761	95.8	97.3	15.7	15.5	-1.5	1.0	1.00
8	2017	cr0	29	1243	1001	99.7	100.6	18.0	18.2	-0.9	1.4	1.00
9	2018	cr0	21	863	1156	98.9	100.0	14.3	13.9	-1.1	1.9	0.99
10	2019	cr0	30	1370	1137	109.0	110.5	17.9	18.0	-1.5	2.2	0.99
11	2020	cr0	12	812	673	104.0	104.5	10.4	10.0	-0.5	4.5	0.90
12	2010	cr1	55	171	186	91.5	92.8	10.1	10.2	-1.3	0.7	1.00
13	2011	cr1	47	144	170	93.3	94.6	11.9	12.2	-1.3	0.8	1.00
14	2012	cr1	47	299	559	93.6	94.8	11.3	11.4	-1.2	0.7	1.00
15	2013	cr1	50	226	439	93.2	94.6	8.8	8.8	-1.4	0.7	1.00
16	2014	cr1	36	392	502	96.7	98.3	12.5	12.3	-1.6	0.6	1.00
17	2015	cr1	30	952	953	99.3	100.7	11.9	12.0	-1.3	0.7	1.00
18	2016	cr1	26	625	651	97.5	98.8	13.6	13.8	-1.3	1.1	1.00
19	2017	cr1	29	994	787	101.6	102.5	14.3	14.5	-0.9	1.4	1.00
20	2018	cr1	20	652	873	99.2	100.0	12.6	13.4	-0.9	1.5	0.99
21	2019	cr1	20	515	502	109.8	111.9	15.0	14.6	-2.1	1.8	0.99
22	2010	cr2	55	130	146	92.6	93.8	9.8	9.8	-1.2	0.8	1.00
23	2011	cr2	47	111	133	94.8	95.9	12.3	12.3	-1.1	0.8	1.00
24	2012	cr2	47	230	424	93.9	94.9	11.7	11.9	-1.0	0.8	1.00
25	2013	cr2	50	175	333	94.5	95.8	8.9	9.2	-1.3	0.7	1.00
26	2014	cr2	36	309	394	97.8	99.1	11.5	11.4	-1.3	0.7	1.00
27	2015	cr2	30	721	717	99.2	100.5	12.4	12.5	-1.4	0.8	1.00
28	2016	cr2	26	484	507	98.6	99.8	12.7	12.9	-1.2	1.1	1.00
29	2017	cr2	29	602	476	101.9	102.6	14.3	14.3	-0.7	1.5	0.99
30	2010	cr3	55	89	101	93.5	94.5	9.2	9.4	-1.0	0.7	1.00
31	2011	cr3	47	76	89	96.0	96.9	11.6	11.7	-0.9	0.7	1.00
32	2012	cr3	47	154	274	94.4	95.3	11.2	11.3	-0.9	0.7	1.00
33	2013	cr3	49	122	224	95.6	96.6	8.4	8.4	-1.0	0.7	1.00
34	2014	cr3	36	213	277	98.3	99.4	10.2	10.2	-1.1	0.7	1.00
35	2015	cr3	30	452	441	99.5	100.7	11.7	11.6	-1.2	0.7	1.00
36	2016	cr3	26	296	300	99.2	100.1	11.5	11.7	-0.9	1.2	0.99

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

Obs	BYR	name	no	mean_noff	std_noff	mean_ss	mean_oss	std_ss	std_oss	mean_dif	std_dif	corr_SS
37	2017	cr3	18	196	121	99.8	100.6	14.2	14.2	-0.8	1.5	0.99
38	2010	cr	55	204	218	92.4	93.7	9.8	9.9	-1.2	0.7	1.00
39	2011	cr	47	175	203	94.8	95.8	12.3	12.3	-1.0	0.8	1.00
40	2012	cr	47	356	670	93.8	94.9	11.8	11.9	-1.0	0.7	1.00
41	2013	cr	50	267	524	94.4	95.5	8.9	9.0	-1.1	0.8	1.00
42	2014	cr	36	460	594	97.7	99.0	11.4	11.5	-1.3	0.7	1.00
43	2015	cr	30	1148	1158	99.5	100.7	12.4	12.4	-1.2	0.7	1.00
44	2016	cr	26	758	802	98.4	99.6	12.7	13.1	-1.2	1.1	1.00
45	2017	cr	29	1299	1037	102.1	102.8	14.2	14.3	-0.7	1.5	0.99
46	2018	cr	21	888	1189	98.3	99.1	12.0	12.7	-0.8	1.9	0.99
47	2019	cr	30	1377	1144	106.8	108.2	14.2	14.4	-1.4	2.0	0.99
48	2020	cr	12	812	673	105.0	105.8	10.1	9.9	-0.8	2.0	0.98
49	2010	nrr0	55	177	190	92.5	93.6	12.3	12.2	-1.1	1.1	1.00
50	2011	nrr0	47	152	178	91.4	92.5	12.5	12.7	-1.1	1.1	1.00
51	2012	nrr0	47	314	600	94.3	95.3	10.9	10.8	-1.0	1.0	1.00
52	2013	nrr0	50	231	463	95.6	96.2	10.7	10.9	-0.6	1.1	0.99
53	2014	nrr0	36	405	529	94.9	95.8	12.8	12.7	-0.9	0.9	1.00
54	2015	nrr0	30	1033	1053	101.1	102.0	15.1	15.1	-0.8	0.8	1.00
55	2016	nrr0	26	699	744	95.4	96.2	12.6	13.1	-0.8	1.5	0.99
56	2017	nrr0	29	1219	982	99.2	99.6	13.8	13.8	-0.4	1.5	0.99
57	2018	nrr0	21	848	1134	96.9	97.5	11.3	10.5	-0.6	1.9	0.99
58	2019	nrr0	30	1403	1136	103.7	104.3	13.7	13.7	-0.6	1.7	0.99
59	2020	nrr0	14	1154	785	100.2	100.6	10.7	9.6	-0.4	5.2	0.87
60	2010	nrr1	55	167	181	95.3	96.0	8.8	8.8	-0.7	1.0	0.99
61	2011	nrr1	47	140	165	98.0	98.7	8.5	8.4	-0.6	1.0	0.99
62	2012	nrr1	47	291	545	97.1	97.5	9.3	9.3	-0.4	0.7	1.00
63	2013	nrr1	50	221	427	96.0	96.7	7.8	7.7	-0.7	1.0	0.99
64	2014	nrr1	36	383	490	98.9	99.8	10.4	10.2	-0.8	0.8	1.00
65	2015	nrr1	30	932	931	100.8	101.3	10.6	10.6	-0.5	0.8	1.00
66	2016	nrr1	26	611	640	96.3	96.8	10.5	10.8	-0.5	1.1	1.00
67	2017	nrr1	29	987	785	101.3	102.5	10.4	10.5	-1.2	0.9	1.00
68	2018	nrr1	20	660	873	98.1	98.0	11.3	11.4	0.2	1.9	0.99
69	2019	nrr1	23	643	573	104.0	105.0	9.4	8.0	-1.0	3.4	0.94
70	2010	nrr2	55	126	141	96.9	97.2	8.4	8.6	-0.3	0.8	1.00
71	2011	nrr2	47	108	130	99.6	99.8	9.2	9.1	-0.2	0.9	1.00
72	2012	nrr2	47	224	417	97.5	98.0	11.0	11.2	-0.5	0.7	1.00

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

Obs	BYR	name	no	mean_noff	std_noff	mean_ss	mean_oss	std_ss	std_oss	mean_dif	std_dif	corr_SS
73	2013	nrr2	49	174	328	98.9	99.5	8.7	8.5	-0.6	1.0	0.99
74	2014	nrr2	36	302	384	99.5	100.2	9.0	9.0	-0.7	0.9	1.00
75	2015	nrr2	30	708	704	100.4	100.8	13.7	13.7	-0.3	1.2	1.00
76	2016	nrr2	26	474	497	97.8	98.2	9.9	10.1	-0.3	1.4	0.99
77	2017	nrr2	29	650	508	101.4	102.0	12.4	12.2	-0.6	1.8	0.99
78	2018	nrr2	13	449	475	97.6	97.7	11.4	10.5	-0.1	3.0	0.97
79	2010	nrr3	55	87	100	96.1	96.5	7.2	7.2	-0.4	0.8	0.99
80	2011	nrr3	47	74	85	100.0	100.1	7.9	7.9	-0.1	0.9	0.99
81	2012	nrr3	47	152	277	97.8	98.1	8.9	8.9	-0.3	0.8	1.00
82	2013	nrr3	49	118	217	98.6	99.1	7.4	7.4	-0.5	0.8	0.99
83	2014	nrr3	36	208	271	99.5	100.1	8.2	8.3	-0.5	1.0	0.99
84	2015	nrr3	30	448	442	101.3	101.4	11.8	12.0	-0.1	1.1	1.00
85	2016	nrr3	26	304	311	98.4	99.0	9.0	9.2	-0.6	1.4	0.99
86	2017	nrr3	23	237	159	102.1	102.4	13.5	13.4	-0.3	1.9	0.99
87	2010	nrr	55	202	216	95.9	96.4	7.9	7.9	-0.5	0.8	1.00
88	2011	nrr	47	173	201	99.4	99.7	8.5	8.5	-0.3	0.8	1.00
89	2012	nrr	47	353	665	97.4	97.8	9.7	9.8	-0.4	0.6	1.00
90	2013	nrr	50	264	517	97.6	98.3	7.8	7.6	-0.6	0.8	1.00
91	2014	nrr	36	456	588	99.3	100.1	8.8	8.9	-0.8	0.7	1.00
92	2015	nrr	30	1138	1147	100.9	101.4	12.2	12.3	-0.5	0.9	1.00
93	2016	nrr	26	753	797	97.5	98.2	9.5	9.7	-0.7	1.2	0.99
94	2017	nrr	29	1293	1033	102.1	102.7	12.2	12.3	-0.6	1.6	0.99
95	2018	nrr	21	888	1189	97.7	97.7	10.1	10.0	0.0	2.1	0.98
96	2019	nrr	30	1425	1155	101.4	102.0	8.6	8.2	-0.6	2.4	0.96
97	2020	nrr	14	1155	786	103.6	103.3	7.5	7.3	0.3	2.5	0.95
98	2010	icf1	55	168	182	99.9	100.0	9.3	9.4	-0.2	0.7	1.00
99	2011	icf1	47	142	166	98.1	98.2	9.6	9.6	-0.1	0.7	1.00
100	2012	icf1	47	294	548	97.2	97.2	10.3	10.1	0.0	0.6	1.00
101	2013	icf1	50	222	430	99.1	99.3	10.6	10.6	-0.2	0.8	1.00
102	2014	icf1	36	385	493	98.3	98.5	11.1	11.0	-0.2	0.6	1.00
103	2015	icf1	30	939	938	98.5	98.5	7.8	7.9	-0.1	0.7	1.00
104	2016	icf1	26	616	645	102.5	102.5	10.2	10.3	0.0	0.5	1.00
105	2017	icf1	29	995	790	98.9	98.9	10.7	10.6	0.0	0.9	1.00
106	2018	icf1	20	664	880	99.0	99.1	10.8	10.7	-0.1	1.7	0.99
107	2019	icf1	22	654	583	103.2	103.3	8.3	6.5	-0.1	3.5	0.92
108	2010	icf2	55	128	143	100.3	100.4	8.8	8.8	-0.1	0.7	1.00

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

Obs	BYR	name	no	mean_noff	std_noff	mean_ss	mean_oss	std_ss	std_oss	mean_dif	std_dif	corr_SS
109	2011	icf2	47	109	131	99.5	99.4	10.0	10.1	0.1	0.6	1.00
110	2012	icf2	47	227	423	98.1	98.0	10.2	10.3	0.1	0.7	1.00
111	2013	icf2	49	176	330	98.6	98.7	10.7	10.6	-0.1	0.7	1.00
112	2014	icf2	36	305	388	99.1	98.9	11.1	11.3	0.2	1.0	1.00
113	2015	icf2	30	715	711	98.6	98.7	8.9	8.9	-0.1	0.7	1.00
114	2016	icf2	26	480	502	102.2	102.2	10.2	10.0	0.0	0.7	1.00
115	2017	icf2	29	654	511	99.2	99.2	11.2	11.5	0.0	1.5	0.99
116	2018	icf2	13	424	450	98.6	99.5	12.8	12.6	-0.8	1.9	0.99
117	2010	icf3	55	88	101	100.7	100.8	9.0	9.0	-0.1	0.6	1.00
118	2011	icf3	47	75	86	99.0	98.9	10.0	10.2	0.1	0.8	1.00
119	2012	icf3	47	154	279	97.6	97.5	10.2	10.3	0.1	0.9	1.00
120	2013	icf3	49	120	221	100.0	100.2	10.4	10.4	-0.2	0.9	1.00
121	2014	icf3	36	211	273	99.8	99.7	10.8	11.1	0.1	0.9	1.00
122	2015	icf3	30	456	448	98.4	98.7	9.2	9.2	-0.3	1.0	0.99
123	2016	icf3	26	308	315	103.1	103.0	9.6	9.7	0.1	1.0	0.99
124	2017	icf3	22	238	157	98.2	98.5	10.6	10.4	-0.3	2.3	0.98
125	2010	icf	55	174	189	100.2	100.5	8.9	8.8	-0.2	0.7	1.00
126	2011	icf	47	147	174	98.9	98.8	9.6	9.7	0.1	0.7	1.00
127	2012	icf	47	303	568	97.6	97.6	10.0	9.9	0.1	0.6	1.00
128	2013	icf	50	229	444	99.4	99.5	10.3	10.2	-0.1	0.7	1.00
129	2014	icf	36	398	509	99.1	99.1	10.8	10.9	0.0	0.8	1.00
130	2015	icf	30	970	968	98.5	98.6	8.3	8.3	-0.1	0.7	1.00
131	2016	icf	26	633	664	102.7	102.6	9.8	9.7	0.1	0.8	1.00
132	2017	icf	29	1019	808	99.0	99.1	10.4	10.7	-0.1	1.4	0.99
133	2018	icf	20	673	892	99.5	99.3	10.6	10.4	0.2	2.1	0.98
134	2019	icf	22	654	584	102.7	102.6	8.7	6.7	0.0	3.1	0.95
135	2010	ifl0	55	172	184	90.9	92.0	12.5	12.2	-1.1	1.0	1.00
136	2011	ifl0	47	147	172	91.0	92.0	14.6	14.8	-1.0	1.0	1.00
137	2012	ifl0	47	306	585	92.3	93.3	15.3	15.1	-1.0	1.1	1.00
138	2013	ifl0	50	224	450	95.5	96.2	11.3	11.2	-0.7	1.0	1.00
139	2014	ifl0	36	394	514	95.6	96.4	12.4	12.2	-0.8	0.9	1.00
140	2015	ifl0	30	1006	1024	100.1	101.0	16.1	15.9	-0.8	1.0	1.00
141	2016	ifl0	26	685	729	97.5	98.2	12.4	12.7	-0.7	1.3	1.00
142	2017	ifl0	29	1190	959	98.3	98.4	16.3	16.3	-0.1	1.6	0.99
143	2018	ifl0	21	833	1116	98.5	99.2	13.0	12.4	-0.8	1.7	0.99
144	2019	ifl0	30	1379	1116	104.6	104.9	14.8	14.8	-0.3	1.8	0.99

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

Obs	BYR	name	no	mean_noff	std_noff	mean_ss	mean_oss	std_ss	std_oss	mean_dif	std_dif	corr_SS
145	2020	ifl0	14	1143	776	101.3	102.1	11.3	9.0	-0.8	5.4	0.88
146	2010	ifl1	55	167	181	94.9	95.7	10.2	10.4	-0.8	0.9	1.00
147	2011	ifl1	47	141	165	96.0	96.6	12.5	12.5	-0.6	0.9	1.00
148	2012	ifl1	47	291	545	95.0	95.8	12.6	12.4	-0.8	0.8	1.00
149	2013	ifl1	50	221	427	94.6	95.5	10.2	10.1	-0.9	1.1	0.99
150	2014	ifl1	36	383	490	97.4	98.1	13.6	13.2	-0.8	1.0	1.00
151	2015	ifl1	30	933	932	99.5	100.3	11.3	11.2	-0.8	0.9	1.00
152	2016	ifl1	26	612	642	98.2	99.0	13.4	13.9	-0.8	1.1	1.00
153	2017	ifl1	29	990	787	100.1	101.1	13.4	14.1	-1.0	1.6	0.99
154	2018	ifl1	20	662	876	97.5	97.5	14.6	14.5	0.1	1.8	0.99
155	2019	ifl1	23	649	578	107.3	108.3	12.0	10.5	-1.0	3.2	0.97
156	2010	ifl2	55	127	142	96.3	96.8	10.3	10.4	-0.6	0.8	1.00
157	2011	ifl2	47	109	131	98.6	98.8	13.1	13.0	-0.2	0.9	1.00
158	2012	ifl2	47	226	421	96.1	96.7	11.9	12.0	-0.6	0.8	1.00
159	2013	ifl2	49	175	328	96.7	97.4	10.9	10.8	-0.7	1.0	1.00
160	2014	ifl2	36	304	387	99.1	99.9	12.4	12.2	-0.8	1.1	1.00
161	2015	ifl2	30	713	708	99.6	100.2	11.8	11.7	-0.5	1.1	1.00
162	2016	ifl2	26	479	501	99.6	100.2	13.7	14.1	-0.6	1.6	0.99
163	2017	ifl2	29	656	513	99.9	100.8	14.6	15.4	-0.9	2.0	0.99
164	2018	ifl2	13	454	480	99.5	100.0	14.4	14.1	-0.5	2.7	0.98
165	2010	ifl3	55	87	101	96.2	96.7	10.2	10.3	-0.5	0.9	1.00
166	2011	ifl3	47	75	86	99.3	99.6	12.7	12.7	-0.3	0.9	1.00
167	2012	ifl3	47	154	279	95.5	96.1	11.7	11.7	-0.6	0.9	1.00
168	2013	ifl3	49	120	220	97.8	98.5	11.1	11.2	-0.8	1.1	1.00
169	2014	ifl3	36	210	272	100.5	101.1	11.5	11.3	-0.6	1.2	0.99
170	2015	ifl3	30	455	448	99.8	100.4	12.5	12.7	-0.6	1.4	0.99
171	2016	ifl3	26	309	316	100.7	101.3	13.8	14.2	-0.6	1.8	0.99
172	2017	ifl3	24	232	165	100.1	100.8	15.2	15.5	-0.7	2.9	0.98
173	2010	ifl	55	201	214	95.7	96.4	10.2	10.3	-0.7	0.7	1.00
174	2011	ifl	47	172	201	98.1	98.4	12.7	12.7	-0.3	0.8	1.00
175	2012	ifl	47	351	661	95.5	96.1	11.9	12.0	-0.6	0.9	1.00
176	2013	ifl	50	262	514	96.3	97.1	10.7	10.7	-0.7	1.1	0.99
177	2014	ifl	36	453	584	99.1	99.9	12.3	12.1	-0.8	1.0	1.00
178	2015	ifl	30	1132	1140	99.6	100.2	11.8	11.9	-0.7	1.2	1.00
179	2016	ifl	26	748	792	99.7	100.5	13.6	14.1	-0.8	1.3	1.00
180	2017	ifl	29	1283	1026	100.2	101.1	14.3	15.0	-0.9	2.0	0.99

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

Obs	BYR	name	no	mean_noff	std_noff	mean_ss	mean_oss	std_ss	std_oss	mean_dif	std_dif	corr_SS
181	2018	ifl	21	881	1180	98.1	97.8	13.3	13.2	0.4	2.2	0.99
182	2019	ifl	30	1405	1141	104.1	105.0	12.1	11.2	-0.9	2.9	0.97
183	2020	ifl	14	1144	777	107.4	107.4	11.9	11.5	0.1	3.0	0.97
184	2010	ais0	55	169	181	92.5	93.7	12.8	12.6	-1.2	1.1	1.00
185	2011	ais0	47	144	168	90.8	91.9	13.7	13.6	-1.1	1.1	1.00
186	2012	ais0	47	301	573	93.5	94.9	12.6	12.4	-1.3	0.9	1.00
187	2013	ais0	50	221	441	94.9	95.9	10.9	11.0	-1.0	1.2	0.99
188	2014	ais0	36	387	507	94.3	95.6	13.6	13.6	-1.3	1.0	1.00
189	2015	ais0	30	984	1001	102.1	103.2	14.8	14.8	-1.1	0.9	1.00
190	2016	ais0	26	672	715	96.6	98.0	13.1	13.3	-1.5	1.1	1.00
191	2017	ais0	29	1169	947	99.0	99.3	16.0	15.9	-0.4	1.2	1.00
192	2018	ais0	21	824	1105	96.3	97.1	12.2	11.0	-0.8	1.9	0.99
193	2019	ais0	30	1382	1117	103.8	104.0	16.5	16.8	-0.2	1.6	1.00
194	2020	ais0	14	1154	784	97.3	98.4	12.2	10.6	-1.1	5.6	0.89
195	2010	ais1	55	164	178	97.0	97.6	9.4	9.4	-0.6	0.8	1.00
196	2011	ais1	47	138	161	97.0	97.7	11.5	11.7	-0.7	0.9	1.00
197	2012	ais1	47	288	539	96.3	96.9	11.2	11.2	-0.6	0.9	1.00
198	2013	ais1	50	219	422	95.7	96.6	8.8	8.6	-0.9	0.9	1.00
199	2014	ais1	36	379	485	98.2	99.1	13.7	13.6	-0.9	0.8	1.00
200	2015	ais1	30	923	922	100.5	101.5	11.1	11.0	-1.0	0.9	1.00
201	2016	ais1	26	609	638	97.5	98.5	12.4	12.6	-1.0	0.8	1.00
202	2017	ais1	29	978	778	100.4	101.1	12.5	12.6	-0.7	1.1	1.00
203	2018	ais1	20	655	869	96.2	96.4	12.9	12.9	-0.3	1.6	0.99
204	2019	ais1	22	629	568	106.9	107.4	12.0	11.4	-0.5	2.2	0.98
205	2010	ais2	55	125	139	97.8	98.3	8.9	8.8	-0.5	0.8	1.00
206	2011	ais2	47	107	127	99.0	99.3	12.3	12.3	-0.3	0.9	1.00
207	2012	ais2	47	222	413	97.0	97.6	11.6	11.6	-0.7	0.8	1.00
208	2013	ais2	49	173	324	98.2	98.9	8.9	8.9	-0.7	0.9	0.99
209	2014	ais2	36	300	382	99.4	100.1	11.8	11.8	-0.6	0.7	1.00
210	2015	ais2	30	702	699	100.5	101.2	12.5	12.4	-0.7	0.8	1.00
211	2016	ais2	26	472	495	99.0	99.7	12.2	12.6	-0.8	1.0	1.00
212	2017	ais2	29	640	500	101.0	101.1	13.4	13.5	-0.1	1.7	0.99
213	2018	ais2	13	408	434	96.2	97.3	12.4	12.0	-1.1	1.6	0.99
214	2010	ais3	55	86	99	97.1	97.4	8.1	8.0	-0.3	0.8	1.00
215	2011	ais3	47	73	84	99.6	99.7	10.6	10.7	-0.1	0.9	1.00
216	2012	ais3	47	151	274	97.0	97.4	11.0	11.0	-0.4	0.8	1.00

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

Obs	BYR	name	no	mean_noff	std_noff	mean_ss	mean_oss	std_ss	std_oss	mean_dif	std_dif	corr_SS
217	2013	ais3	49	117	215	98.9	99.3	8.0	7.9	-0.5	0.9	0.99
218	2014	ais3	36	206	269	99.8	100.1	10.0	10.1	-0.4	0.8	1.00
219	2015	ais3	30	445	437	101.2	101.7	11.4	11.5	-0.5	1.3	0.99
220	2016	ais3	26	301	308	99.3	99.8	11.1	11.4	-0.5	1.3	0.99
221	2017	ais3	22	228	151	100.4	100.4	14.2	13.7	0.0	2.1	0.99
222	2010	ais	55	200	214	97.1	97.6	8.5	8.4	-0.5	0.8	1.00
223	2011	ais	47	171	198	98.6	98.9	11.2	11.3	-0.2	0.9	1.00
224	2012	ais	47	350	659	96.7	97.2	11.2	11.2	-0.5	0.7	1.00
225	2013	ais	50	262	512	97.4	98.2	8.2	8.2	-0.8	0.7	1.00
226	2014	ais	36	452	583	99.1	99.7	11.5	11.5	-0.6	0.8	1.00
227	2015	ais	30	1127	1134	100.8	101.5	11.5	11.5	-0.6	0.8	1.00
228	2016	ais	26	747	791	98.6	99.5	11.4	11.8	-0.9	1.1	1.00
229	2017	ais	29	1280	1023	101.1	101.4	12.9	12.8	-0.2	1.5	0.99
230	2018	ais	21	881	1182	96.0	96.3	10.9	10.9	-0.3	2.1	0.98
231	2019	ais	30	1412	1145	102.8	103.1	11.1	11.1	-0.3	2.3	0.98
232	2020	ais	14	1154	785	101.4	102.1	9.9	9.9	-0.6	2.4	0.97
233	2010	fert	55	174	189	95.3	96.0	10.2	10.3	-0.8	0.7	1.00
234	2011	fert	47	147	174	96.9	97.4	12.7	12.8	-0.5	0.9	1.00
235	2012	fert	47	303	568	94.8	95.6	12.3	12.3	-0.8	0.7	1.00
236	2013	fert	50	229	444	96.2	96.9	10.6	10.5	-0.7	1.0	1.00
237	2014	fert	36	398	509	98.4	99.3	12.4	12.2	-0.8	0.9	1.00
238	2015	fert	30	970	968	99.9	100.6	12.4	12.3	-0.7	0.9	1.00
239	2016	fert	26	633	664	99.3	100.2	13.3	13.7	-0.8	1.1	1.00
240	2017	fert	29	1019	808	100.0	100.7	14.5	14.9	-0.7	1.6	0.99
241	2018	fert	20	673	892	98.2	98.2	13.4	13.2	0.1	2.0	0.99
242	2019	fert	22	654	584	106.3	107.2	12.9	11.9	-0.9	2.4	0.98

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

Obs	diff	d_cr	d_nrr	d_icf	d_ifl	d_ais	d_hst	d_fert
1	-7	.	.	1	.	.	.	.
2	-6	1	1	.	1	1	.	.
3	-5	3	2	2	2	3	.	1
4	-4	5	4	2	8	1	.	3
5	-3	15	8	1	23	10	.	15
6	-2	100	39	9	41	36	.	52
7	-1	168	129	89	133	149	.	145
8	0	66	147	166	120	135	.	104
9	1	20	37	69	32	32	.	28
10	2	4	13	15	10	11	.	10
11	3	.	2	5	10	4	.	3
12	4	1	1	2	3	2	.	1
13	5	.	.	1	1	.	.	.
14	6	.	2	.	.	1	.	.
15	7	.	.	.	1	.	.	.

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

Obs	diff	p_cr	p_nrr	p_icf	p_ifl	p_ais	p_hst	p_fert
1	-7	.	.	0	.	.	.	.
2	-6	0	0	.	0	0	.	.
3	-5	1	1	1	1	1	.	0
4	-4	1	1	1	2	0	.	1
5	-3	4	2	0	6	3	.	4
6	-2	26	10	2	11	9	.	14
7	-1	44	34	25	35	39	.	40
8	0	17	38	46	31	35	.	29
9	1	5	10	19	8	8	.	8
10	2	1	3	4	3	3	.	3
11	3	.	1	1	3	1	.	1
12	4	0	0	1	1	1	.	0
13	5	.	.	0	0	.	.	.
14	6	.	1	.	.	0	.	.
15	7	.	.	.	0	.	.	.

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

Obs	BYR	name	no	mean_noff	std_noff	mean_ss	mean_oss	std_ss	std_oss	mean_dif	std_dif	corr_SS
1	2019	cr0	19	.	.	99.4	100.9	14.8	15.2	-1.5	1.0	1.00
2	2020	cr0	10	.	.	109.0	109.6	11.5	11.2	-0.6	0.8	1.00
3	2021	cr0	40	.	.	108.4	109.7	11.1	11.3	-1.2	1.3	0.99
4	2022	cr0	34	.	.	103.3	104.3	9.5	9.3	-1.0	2.3	0.97
5	2023	cr0	28	.	.	109.9	111.7	8.8	8.6	-1.8	1.4	0.99
6	2019	cr1	21	.	.	96.8	98.5	11.8	12.0	-1.7	1.5	0.99
7	2020	cr1	32	.	.	106.0	106.8	9.3	9.6	-0.8	1.8	0.98
8	2021	cr1	40	.	.	107.5	109.0	9.8	9.9	-1.5	1.3	0.99
9	2022	cr1	34	.	.	105.2	106.2	8.7	8.8	-1.0	1.4	0.99
10	2023	cr1	28	.	.	108.0	109.7	5.8	5.8	-1.7	1.2	0.98
11	2019	cr2	45	.	.	100.1	101.4	12.6	12.7	-1.3	1.4	0.99
12	2020	cr2	32	.	.	105.4	106.3	8.8	9.2	-0.8	2.0	0.98
13	2021	cr2	40	.	.	107.1	108.6	9.2	9.3	-1.5	1.4	0.99
14	2022	cr2	34	.	.	105.5	106.3	8.7	8.8	-0.8	1.5	0.99
15	2023	cr2	28	.	.	107.4	108.9	5.5	5.6	-1.5	1.2	0.98
16	2019	cr3	51	.	.	102.4	103.7	12.6	12.7	-1.4	1.6	0.99
17	2020	cr3	32	.	.	104.6	105.4	7.9	8.1	-0.8	1.8	0.98
18	2021	cr3	40	.	.	106.6	107.7	8.0	8.0	-1.2	1.3	0.99
19	2022	cr3	34	.	.	105.3	105.9	8.1	8.1	-0.6	1.3	0.99
20	2023	cr3	28	.	.	106.5	107.9	5.4	5.4	-1.4	1.1	0.98
21	2019	cr	19	.	.	96.6	98.2	10.7	11.1	-1.5	1.4	0.99
22	2020	cr	10	.	.	104.8	106.1	8.8	9.8	-1.3	1.8	0.99
23	2021	cr	40	.	.	107.3	108.6	9.1	9.2	-1.4	1.3	0.99
24	2022	cr	34	.	.	105.5	106.3	8.8	8.8	-0.9	1.5	0.99
25	2023	cr	28	.	.	107.5	109.1	5.6	5.6	-1.6	1.2	0.98
26	2019	nrr0	19	.	.	99.4	100.2	12.7	12.6	-0.7	1.7	0.99
27	2021	nrr0	38	.	.	103.4	104.1	9.7	10.2	-0.6	1.5	0.99
28	2022	nrr0	34	.	.	97.9	98.4	7.0	7.2	-0.5	2.6	0.94
29	2023	nrr0	28	.	.	104.7	105.6	9.2	8.8	-0.9	2.1	0.97
30	2019	nrr1	19	.	.	100.1	100.7	8.3	8.3	-0.6	1.5	0.98
31	2020	nrr1	26	.	.	101.2	101.5	8.4	8.6	-0.3	2.1	0.97
32	2021	nrr1	40	.	.	104.0	104.9	7.0	6.7	-1.0	2.1	0.95
33	2022	nrr1	34	.	.	101.4	102.1	7.0	7.2	-0.7	1.4	0.98
34	2023	nrr1	28	.	.	103.4	104.7	4.8	4.6	-1.3	1.5	0.95
35	2019	nrr2	36	.	.	99.5	100.0	9.4	9.1	-0.4	1.5	0.99
36	2020	nrr2	32	.	.	101.2	100.9	7.7	7.8	0.3	1.8	0.97

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

Obs	BYR	name	no	mean_noff	std_noff	mean_ss	mean_oss	std_ss	std_oss	mean_dif	std_dif	corr_SS
37	2021	nrr2	40	.	.	103.7	104.2	6.3	5.8	-0.6	1.8	0.96
38	2022	nrr2	34	.	.	101.6	102.3	7.5	7.6	-0.6	1.3	0.99
39	2023	nrr2	28	.	.	102.4	103.4	4.8	4.8	-1.0	1.3	0.97
40	2019	nrr3	51	.	.	100.3	100.4	8.2	8.3	-0.2	2.0	0.97
41	2020	nrr3	32	.	.	101.2	101.2	6.4	6.4	-0.1	1.7	0.97
42	2021	nrr3	40	.	.	103.2	103.7	5.5	5.0	-0.5	1.6	0.96
43	2022	nrr3	34	.	.	102.0	102.6	6.2	6.4	-0.6	1.0	0.99
44	2023	nrr3	28	.	.	102.2	103.2	4.7	4.7	-1.0	1.2	0.97
45	2019	nrr	19	.	.	99.7	100.1	9.1	9.2	-0.3	1.4	0.99
46	2021	nrr	38	.	.	103.8	104.4	6.1	5.5	-0.6	1.8	0.96
47	2022	nrr	34	.	.	101.9	102.4	7.0	7.2	-0.5	1.2	0.99
48	2023	nrr	28	.	.	102.8	103.9	4.8	4.5	-1.1	1.3	0.96
49	2019	icf1	19	.	.	95.4	95.9	7.8	7.9	-0.5	1.0	0.99
50	2020	icf1	28	.	.	103.1	103.0	10.6	10.0	0.0	1.6	0.99
51	2021	icf1	40	.	.	101.7	101.8	7.4	7.2	-0.1	2.0	0.96
52	2022	icf1	34	.	.	103.9	104.2	7.9	7.9	-0.3	1.8	0.97
53	2023	icf1	28	.	.	103.0	102.9	7.1	7.1	0.1	1.4	0.98
54	2019	icf2	40	.	.	99.0	99.2	9.4	9.2	-0.2	1.9	0.98
55	2020	icf2	32	.	.	104.0	103.8	11.3	11.3	0.3	1.3	0.99
56	2021	icf2	40	.	.	101.4	101.4	7.4	7.3	-0.1	1.8	0.97
57	2022	icf2	34	.	.	104.9	104.9	7.5	7.5	0.0	1.5	0.98
58	2023	icf2	28	.	.	102.7	102.5	7.1	7.2	0.1	1.2	0.99
59	2019	icf3	51	.	.	100.1	100.5	8.8	8.0	-0.5	2.1	0.97
60	2020	icf3	32	.	.	104.2	103.9	10.1	10.4	0.3	1.3	0.99
61	2021	icf3	40	.	.	101.6	102.0	7.6	7.7	-0.4	1.9	0.97
62	2022	icf3	34	.	.	105.6	105.3	7.1	7.5	0.4	1.7	0.97
63	2023	icf3	28	.	.	103.4	103.3	7.0	7.0	0.1	1.7	0.97
64	2019	icf	19	.	.	95.2	96.1	8.2	8.3	-0.9	1.0	0.99
65	2020	icf	28	.	.	103.6	103.4	9.7	9.7	0.3	1.4	0.99
66	2021	icf	40	.	.	101.5	101.8	7.4	7.3	-0.3	2.0	0.96
67	2022	icf	34	.	.	104.9	104.8	7.2	7.5	0.1	1.7	0.97
68	2023	icf	28	.	.	103.0	102.9	6.8	7.0	0.2	1.4	0.98
69	2019	ifl0	19	.	.	98.1	98.8	13.6	13.7	-0.7	1.4	0.99
70	2021	ifl0	38	.	.	103.6	104.1	9.6	9.9	-0.5	1.8	0.98
71	2022	ifl0	34	.	.	99.6	100.3	8.5	8.6	-0.7	2.6	0.95
72	2023	ifl0	28	.	.	105.6	106.4	9.2	8.7	-0.8	1.8	0.98

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

Obs	BYR	name	no	mean_noff	std_noff	mean_ss	mean_oss	std_ss	std_oss	mean_dif	std_dif	corr_SS
73	2019	ifl1	19	.	.	94.6	95.7	10.7	11.1	-1.1	1.7	0.99
74	2020	ifl1	26	.	.	105.2	105.3	10.2	10.0	-0.2	2.3	0.97
75	2021	ifl1	40	.	.	105.1	106.2	9.7	9.4	-1.1	2.2	0.97
76	2022	ifl1	34	.	.	105.5	106.4	8.1	8.3	-0.9	1.7	0.98
77	2023	ifl1	28	.	.	105.9	107.3	5.6	5.4	-1.4	1.9	0.94
78	2019	ifl2	36	.	.	98.0	98.8	13.9	13.6	-0.8	2.4	0.98
79	2020	ifl2	32	.	.	105.5	105.6	9.6	9.2	-0.1	2.5	0.97
80	2021	ifl2	40	.	.	104.0	105.1	9.0	8.7	-1.1	2.0	0.98
81	2022	ifl2	34	.	.	106.0	107.0	8.3	8.3	-1.0	1.7	0.98
82	2023	ifl2	28	.	.	104.3	105.8	6.2	6.0	-1.5	1.6	0.97
83	2019	ifl3	51	.	.	99.9	100.8	12.7	12.6	-0.9	2.6	0.98
84	2020	ifl3	32	.	.	105.8	105.8	9.6	9.2	0.0	2.4	0.97
85	2021	ifl3	40	.	.	104.3	105.5	8.5	8.2	-1.2	2.2	0.97
86	2022	ifl3	34	.	.	107.4	107.8	8.3	8.2	-0.4	1.7	0.98
87	2023	ifl3	28	.	.	104.7	105.9	6.7	6.8	-1.2	1.5	0.97
88	2019	ifl	19	.	.	94.2	95.3	11.8	12.2	-1.2	1.8	0.99
89	2021	ifl	38	.	.	104.6	105.6	9.2	8.8	-1.0	2.1	0.97
90	2022	ifl	34	.	.	106.6	107.3	8.2	8.2	-0.7	1.7	0.98
91	2023	ifl	28	.	.	105.0	106.4	6.1	6.0	-1.4	1.6	0.96
92	2019	ais0	19	.	.	98.2	98.7	13.7	13.8	-0.5	1.2	1.00
93	2021	ais0	38	.	.	103.0	103.5	10.3	10.7	-0.5	1.6	0.99
94	2022	ais0	34	.	.	96.6	97.1	9.4	9.4	-0.4	2.6	0.96
95	2023	ais0	28	.	.	103.6	104.5	8.6	8.3	-0.8	2.1	0.97
96	2019	ais1	20	.	.	96.2	97.0	11.2	11.3	-0.9	1.3	0.99
97	2020	ais1	28	.	.	101.6	102.1	9.1	9.3	-0.5	2.2	0.97
98	2021	ais1	40	.	.	104.2	105.0	8.7	8.6	-0.8	1.5	0.98
99	2022	ais1	34	.	.	100.6	101.4	8.1	8.3	-0.8	1.5	0.98
100	2023	ais1	28	.	.	103.9	105.0	4.8	4.9	-1.1	1.3	0.97
101	2019	ais2	40	.	.	98.7	98.8	11.9	11.7	-0.2	1.9	0.99
102	2020	ais2	32	.	.	101.5	102.1	8.1	8.3	-0.5	2.0	0.97
103	2021	ais2	40	.	.	103.0	104.0	8.0	7.8	-1.0	1.9	0.97
104	2022	ais2	34	.	.	100.7	101.5	8.2	8.3	-0.8	1.7	0.98
105	2023	ais2	28	.	.	102.7	103.8	4.8	5.1	-1.1	1.5	0.96
106	2019	ais3	51	.	.	99.8	100.3	10.5	10.4	-0.6	2.0	0.98
107	2020	ais3	32	.	.	101.5	101.8	7.6	7.7	-0.3	1.9	0.97
108	2021	ais3	40	.	.	102.8	103.7	7.2	6.9	-1.0	2.1	0.96

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

Obs	BYR	name	no	mean_noff	std_noff	mean_ss	mean_oss	std_ss	std_oss	mean_dif	std_dif	corr_SS
109	2022	ais3	34	.	.	101.2	101.3	7.4	7.3	-0.1	1.6	0.98
110	2023	ais3	28	.	.	102.5	103.7	4.7	5.3	-1.2	1.4	0.97
111	2019	ais	19	.	.	95.6	96.4	10.5	10.3	-0.8	1.6	0.99
112	2021	ais	38	.	.	103.4	104.3	7.9	7.7	-0.8	1.8	0.97
113	2022	ais	34	.	.	100.9	101.4	7.6	7.8	-0.6	1.6	0.98
114	2023	ais	28	.	.	103.1	104.1	4.5	4.9	-1.1	1.2	0.97
115	2019	fert	19	.	.	94.3	95.3	11.9	12.4	-1.0	1.4	0.99
116	2020	fert	28	.	.	104.6	104.9	9.2	8.9	-0.3	2.0	0.98
117	2021	fert	40	.	.	104.6	105.7	9.1	9.1	-1.1	1.9	0.98
118	2022	fert	34	.	.	105.1	105.8	8.2	8.2	-0.7	1.6	0.98
119	2023	fert	28	.	.	105.1	106.5	5.7	5.8	-1.3	1.6	0.96

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

Obs	diff	d_cr	d_nrr	d_icf	d_ifl	d_ais	d_hst	d_fert
1	.	.	.	.	.	.	185	.
2	-6	.	1	.	.	1	.	2
3	-5	.	.	1	1	1	.	.
4	-4	5	3	3	6	5	.	5
5	-3	23	8	4	23	8	.	22
6	-2	30	21	19	25	23	.	24
7	-1	38	30	30	23	34	.	33
8	0	20	38	42	17	29	.	32
9	1	12	18	25	22	20	.	18
10	2	3	6	18	5	4	.	9
11	3	.	1	5	3	1	.	4
12	4	.	.	2	1	.	.	.

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

Obs	diff	p_cr	p_nrr	p_icf	p_ifl	p_ais	p_hst	p_fert
1	.	.	.	.	.	.	.	.
2	-6	.	1	.	.	1	.	1
3	-5	.	.	1	1	1	.	.
4	-4	4	2	2	5	4	.	3
5	-3	18	6	3	18	6	.	15
6	-2	23	17	13	20	18	.	16
7	-1	29	24	20	18	27	.	22
8	0	15	30	28	13	23	.	21
9	1	9	14	17	17	16	.	12
10	2	2	5	12	4	3	.	6
11	3	.	1	3	2	1	.	3
12	4	.	.	1	1	.	.	.