



GENETIC BENCHMARKING REPORT

Angus Australia

JUNE 2025

<u>Report</u>	<u>Page</u>
Genetic Progress - Summary	1
Genetic Progress - Relative Change in each Trait	2
Genetic Progress - By Trait	3
Use of Reproductive Technologies	12
Generation Length - Sire and Dam Age	13
Genetic Diversity - Inbreeding	14
Genetic Conditions - Carrier Frequency By Register	15
Appendix 2 - Breed Genetic Trends	16

Genetic Progress Summary

2018 to 2023

Date: May 26, 2025

Page: 1

This report assesses the change in the average EBVs of Angus seedstock animals across the nominated five year period.

Trait	Units	Breed	
		Change	Av. Change / Yr
Calving Ease Direct	%	+1.1	+0.2
Calving Ease Daughters	%	+1.2	+0.2
Gestation Length	days	-0.9	-0.2
Birth Weight	kg	-0.3	-0.1
200 Day Growth	kg	+5.0	+1.0
400 Day Weight	kg	+9.2	+1.8
600 Day Weight	kg	+10.9	+2.2
Mature Cow Weight	kg	+7.7	+1.5
Mature Body Condition	score	+0.0	+0.0
Mature Cow Height	cm	-0.2	+0.0
Milk	kg	+1.2	+0.2
Scrotal Size	cm	+0.4	+0.1
Days to Calving	days	-0.4	-0.1
Carcase Weight	kg	+6.7	+1.3
Carcase EMA	cm.sq	+1.1	+0.2
Carcase Rib Fat	mm	+0.1	+0.0
Carcase Rump Fat	mm	+0.1	+0.0
Retail Beef Yield	%	-0.1	+0.0
Carcase IMF	%	+0.6	+0.1
Docility	%	+2.9	+0.6
NFI-F	%	+0.1	+0.0
Claw Set	score	+0.0	+0.0
Foot Angle	score	+0.0	+0.0
Leg Angle	score	+0.0	+0.0
Angus Breeding (\$A)	\$	+26.7	+5.3
Domestic (\$D)	\$	+21.9	+4.4
Heavy Grain (\$GN)	\$	+37.4	+7.5
Heavy Grass(\$GS)	\$	+27.3	+5.5
Angus Breeding Low Feed Cost (\$A-L)	\$	+41.8	+8.4
Domestic Low Feed Cost (\$D-L)	\$	+35.7	+7.1
Heavy Grain Low Feed Cost (\$GN-L)	\$	+53.2	+10.6
Heavy Grass Low Feed Cost (\$GS-L)	\$	+48.0	+9.6
AngusPRO (\$PRO)	\$	+27.8	+5.6
Angus Terminal Sire (\$T)	\$	+22.7	+4.5

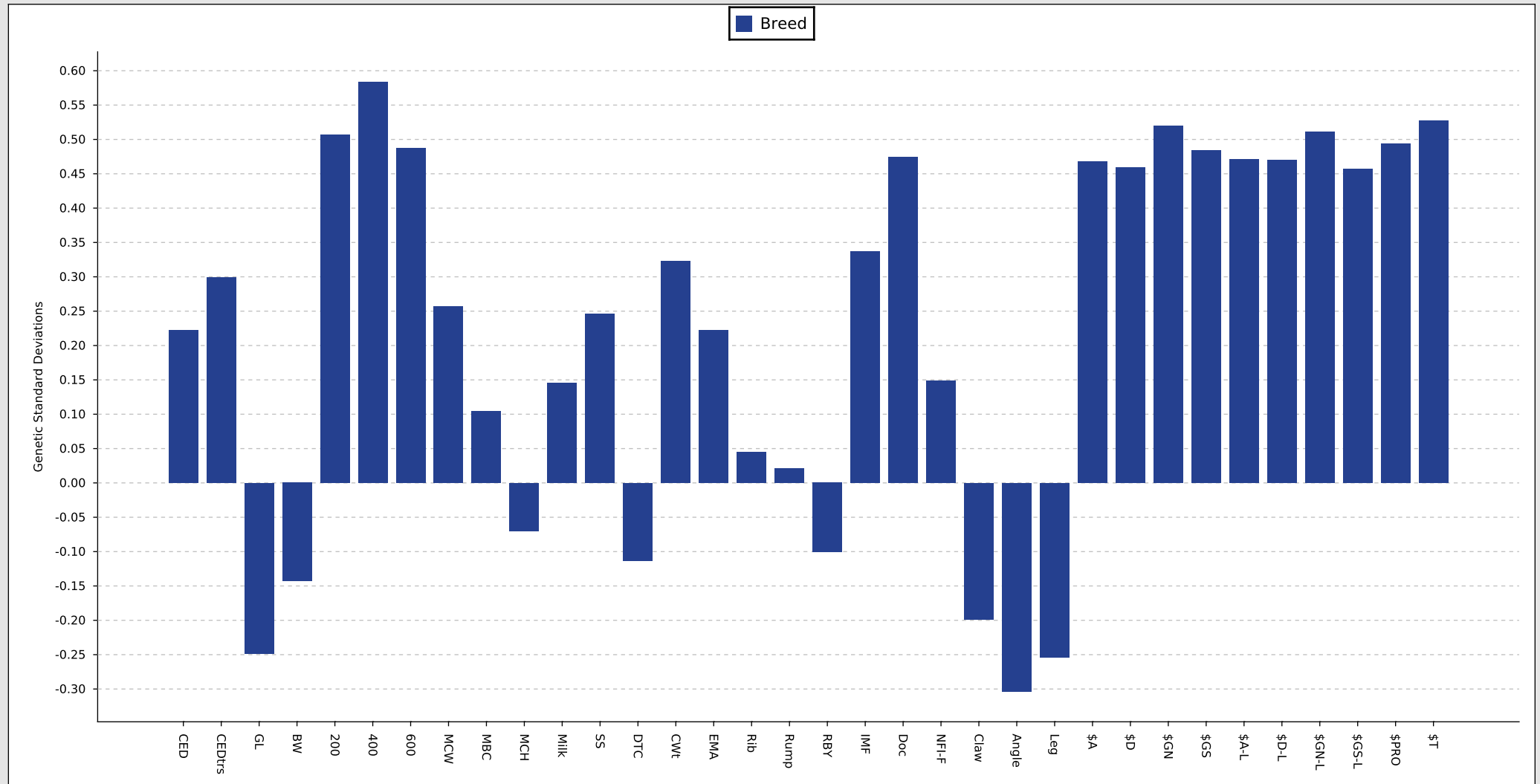
Genetic Progress Summary

Date: May 26, 2025

Relative Change in Each Trait - 2018 to 2023

Page: 2

This report assesses the change in the average EBVs of Angus seedstock animals across the nominated five year period in standard deviation units (rather than the units of measurement), enabling comparison of the relative change that has occurred in individual traits.



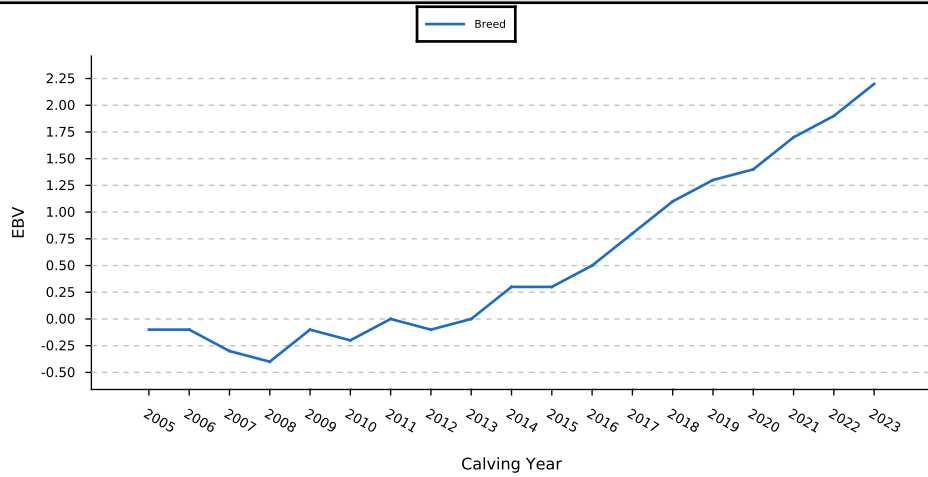
Genetic Progress By Trait

Date: May 26, 2025

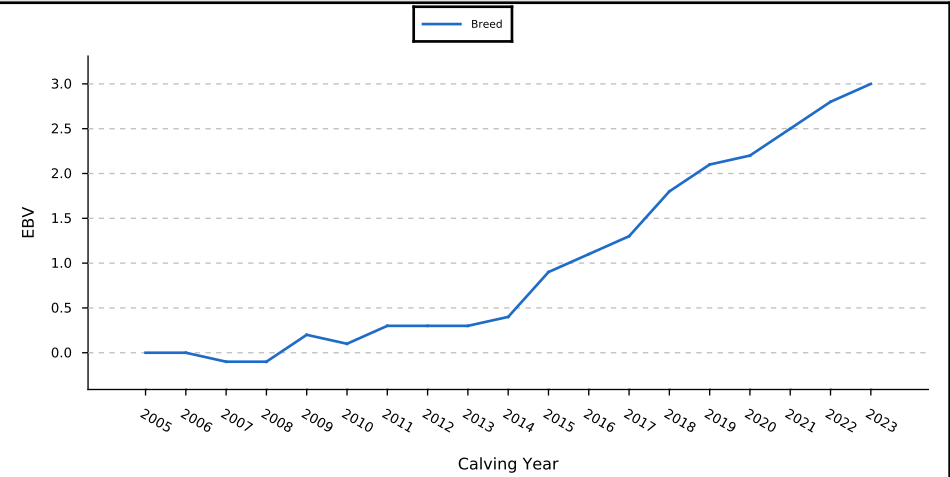
Page: 3

The reports below assess the change in the average EBVs of Angus seedstock animals born in each year for each respective trait.

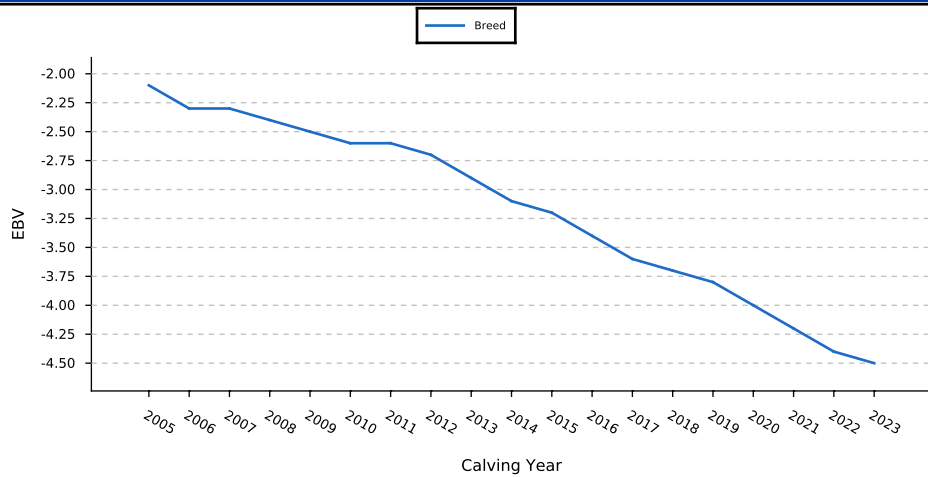
Calving Ease Direct (%)



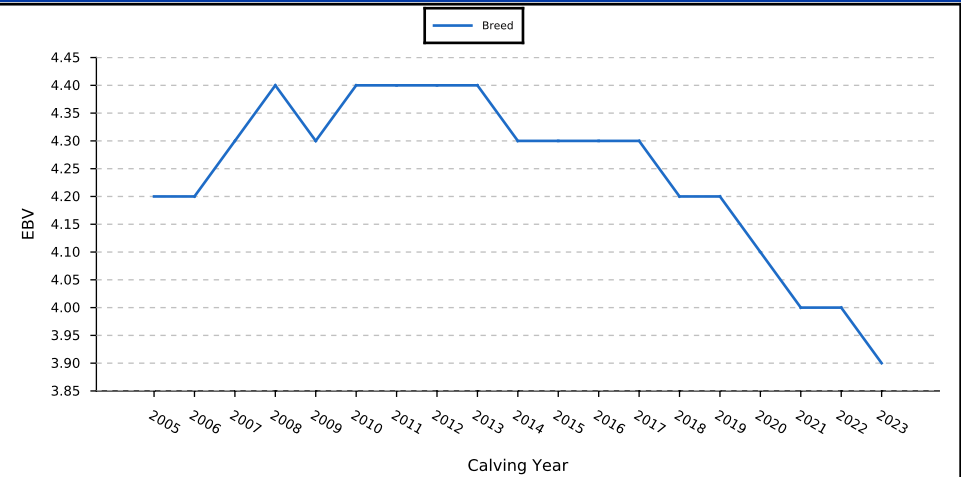
Calving Ease Daughters (%)



Gestation Length (days)



Birth Weight (kg)



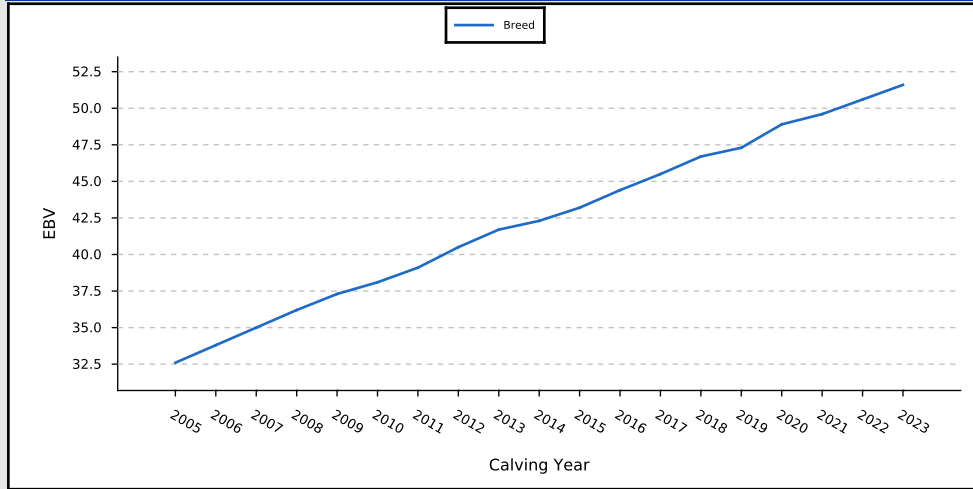
Genetic Progress By Trait

Date: May 26, 2025

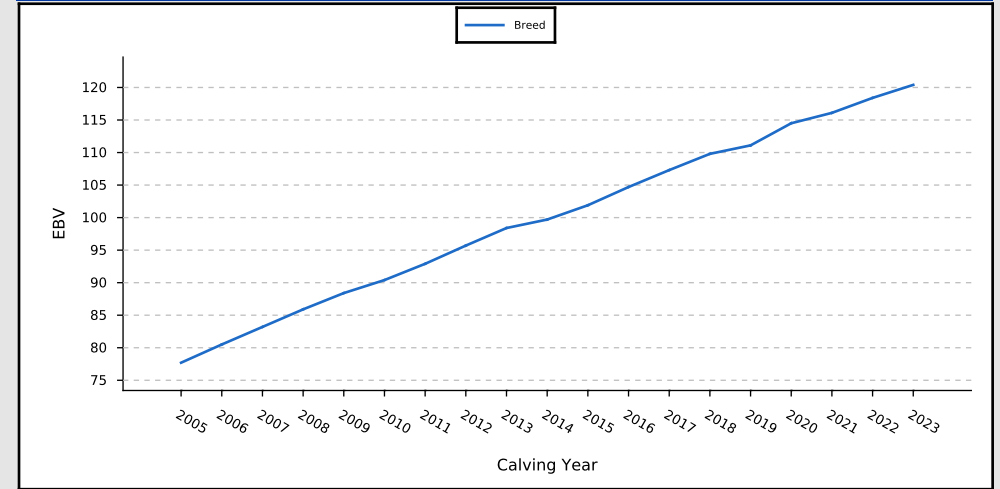
Page: 4

The reports below assess the change in the average EBVs of Angus seedstock animals born in each year for each respective trait.

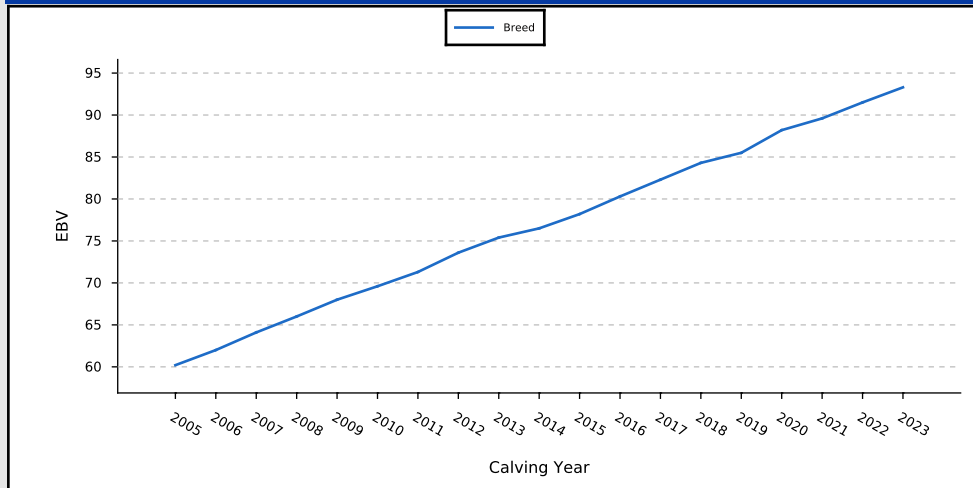
200 Day Growth (kg)



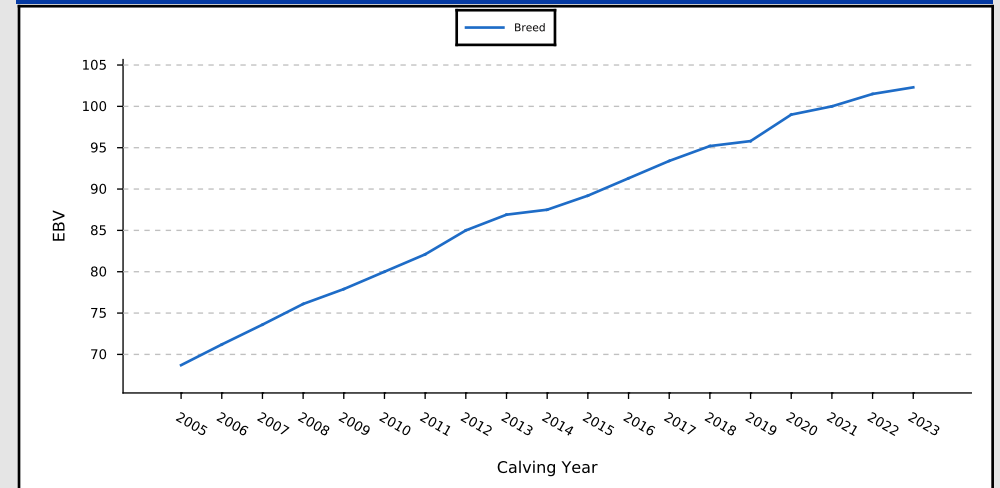
600 Day Weight (kg)



400 Day Weight (kg)



Mature Weight (kg)



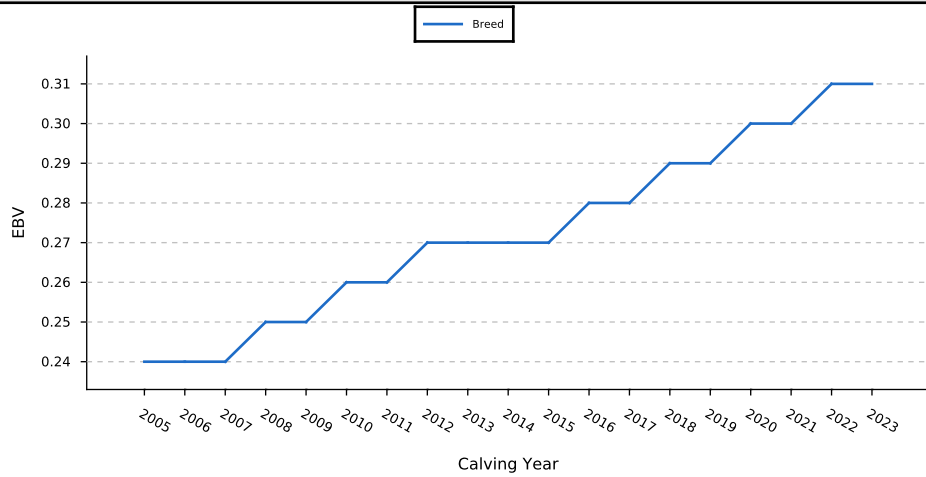
Genetic Progress By Trait

Date: May 26, 2025

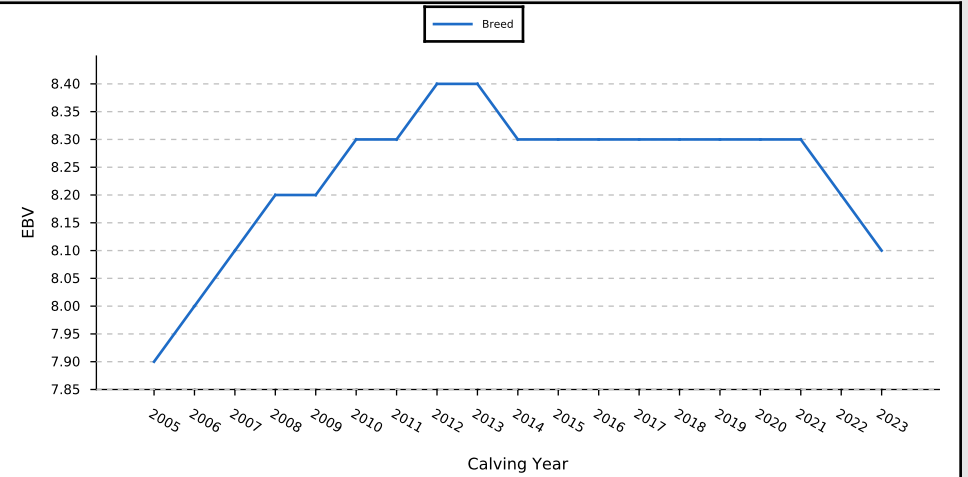
Page: 5

The reports below assess the change in the average EBVs of Angus seedstock animals born in each year for each respective trait.

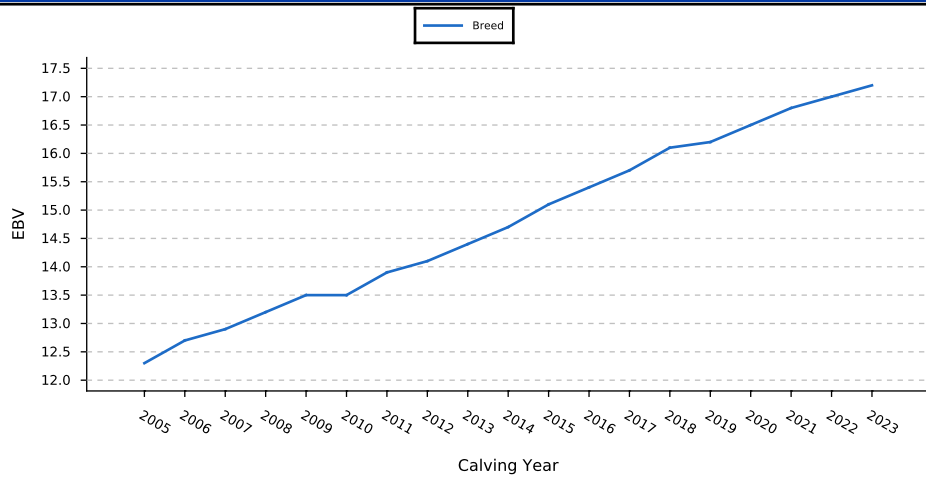
Mature Body Condition (score)



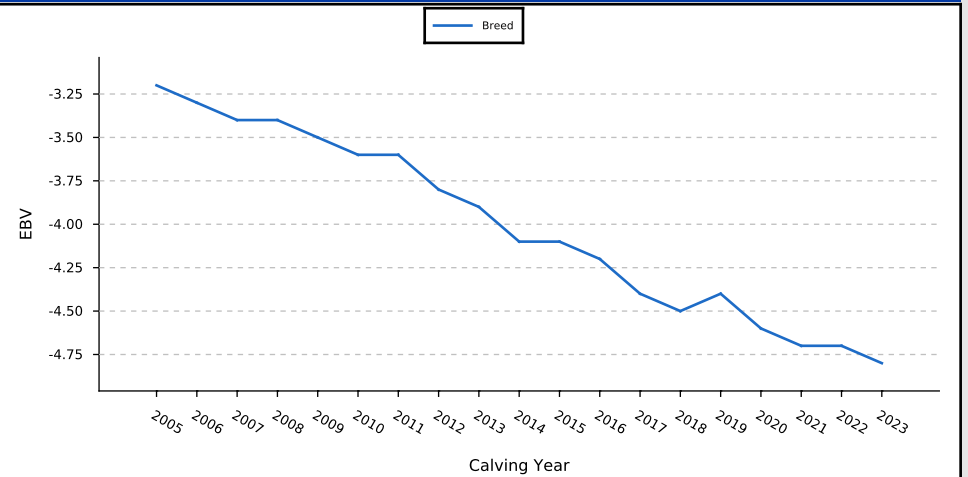
Mature Cow Height (cm)



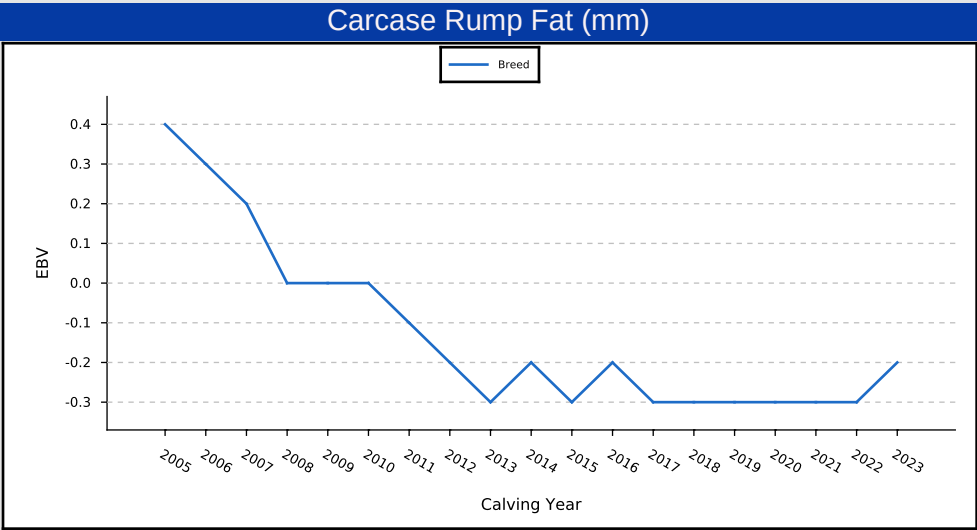
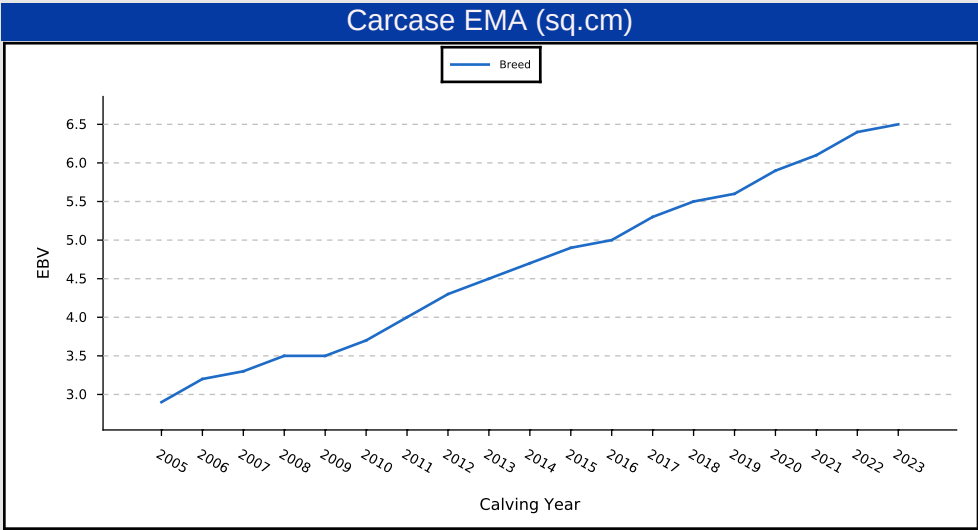
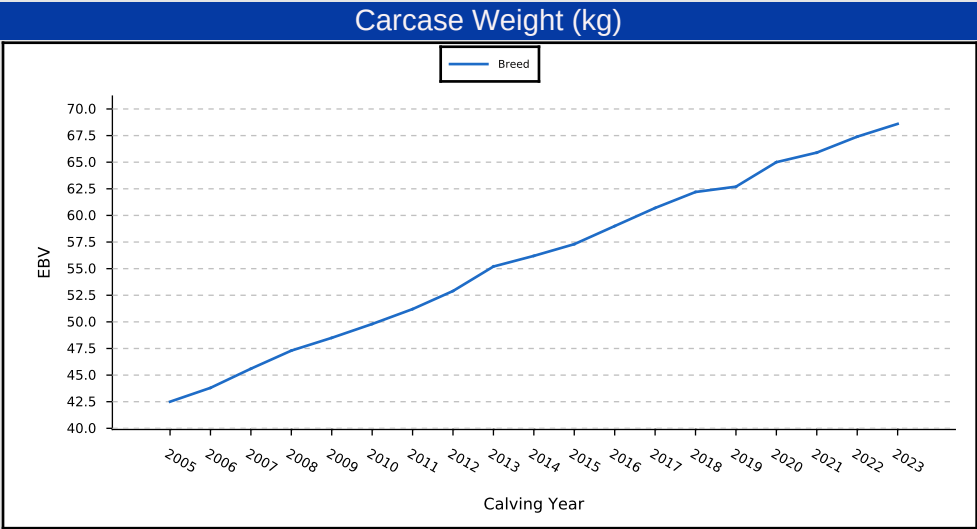
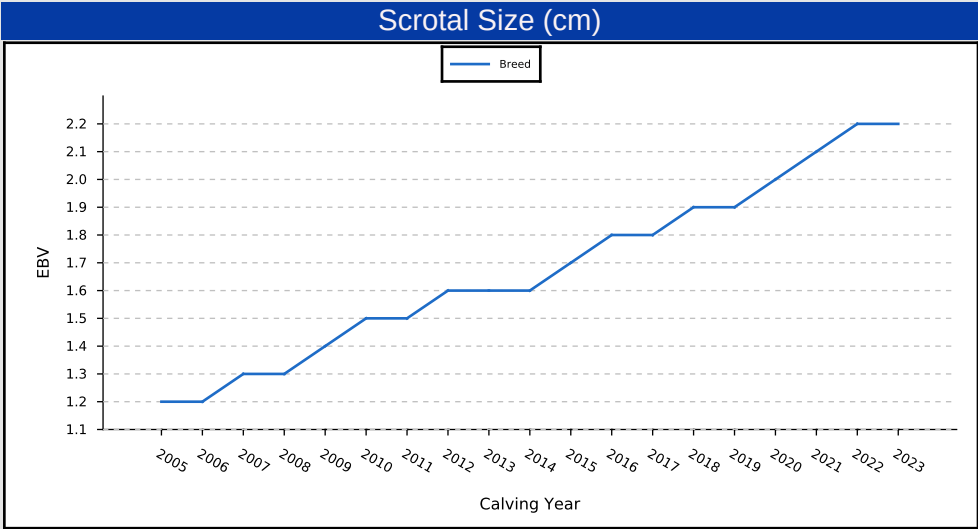
200 Day Milk (kg)



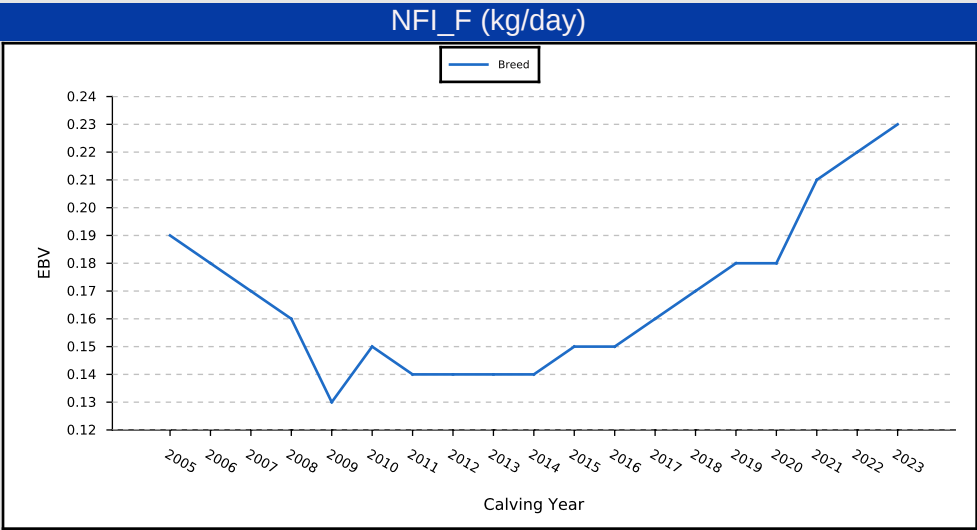
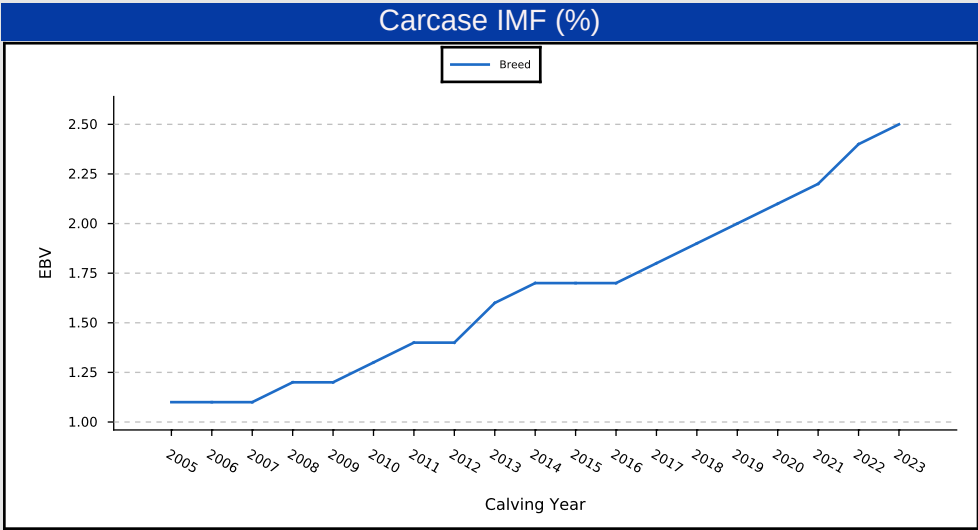
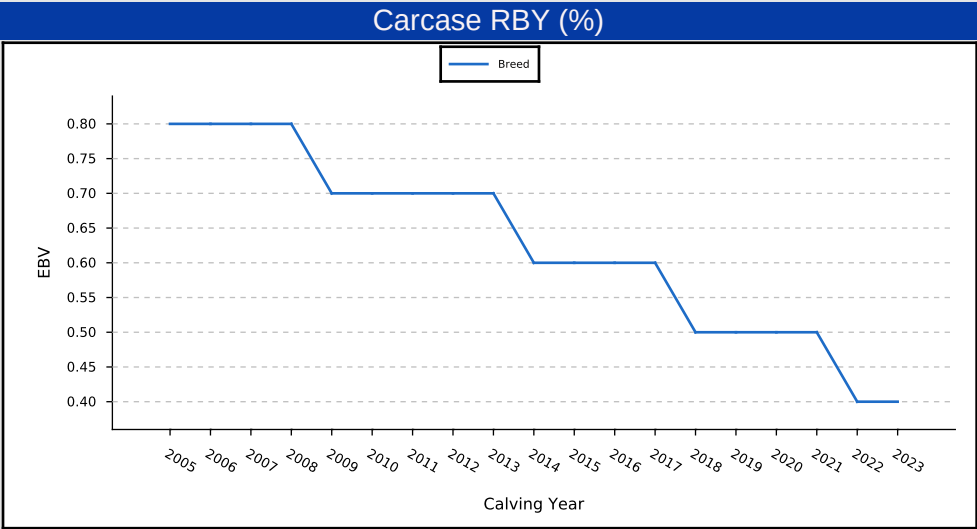
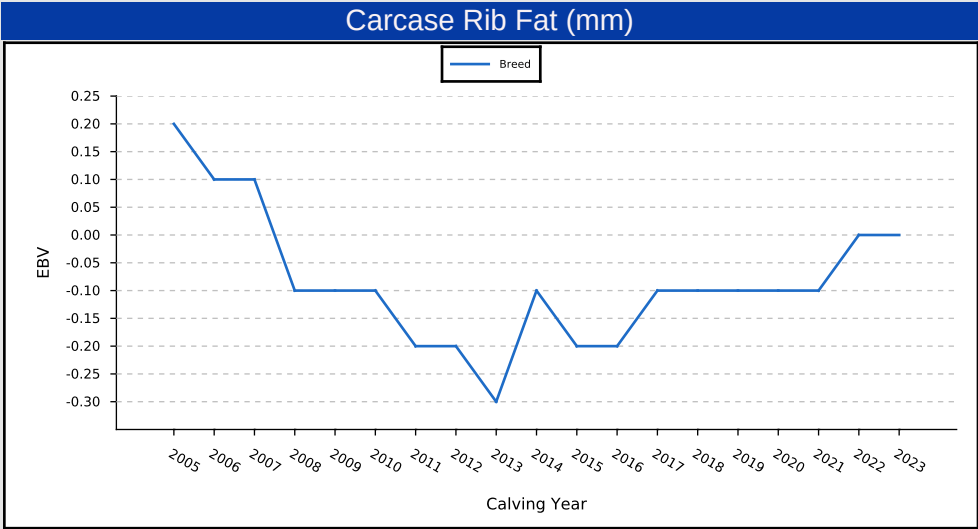
Days to Calving (days)



The reports below assess the change in the average EBVs of Angus seedstock animals born in each year for each respective trait.



The reports below assess the change in the average EBVs of Angus seedstock animals born in each year for each respective trait.



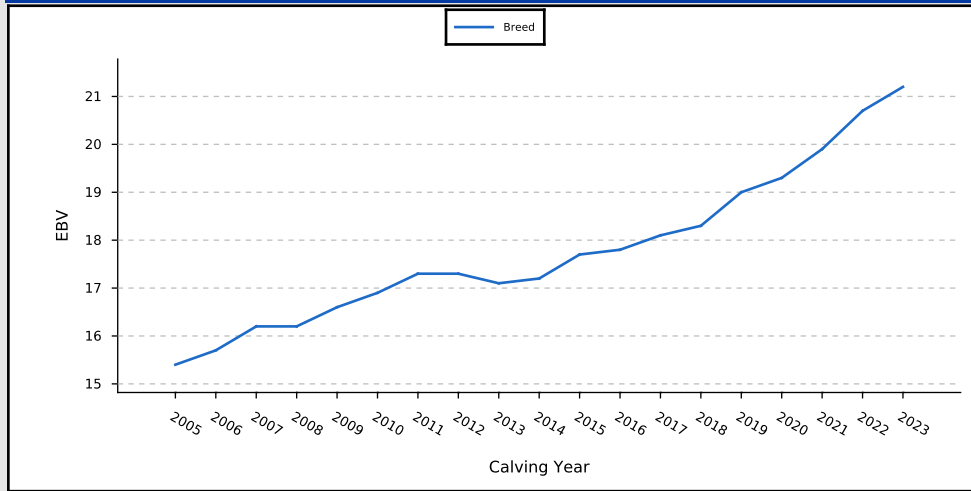
Genetic Progress By Trait

Date: May 26, 2025

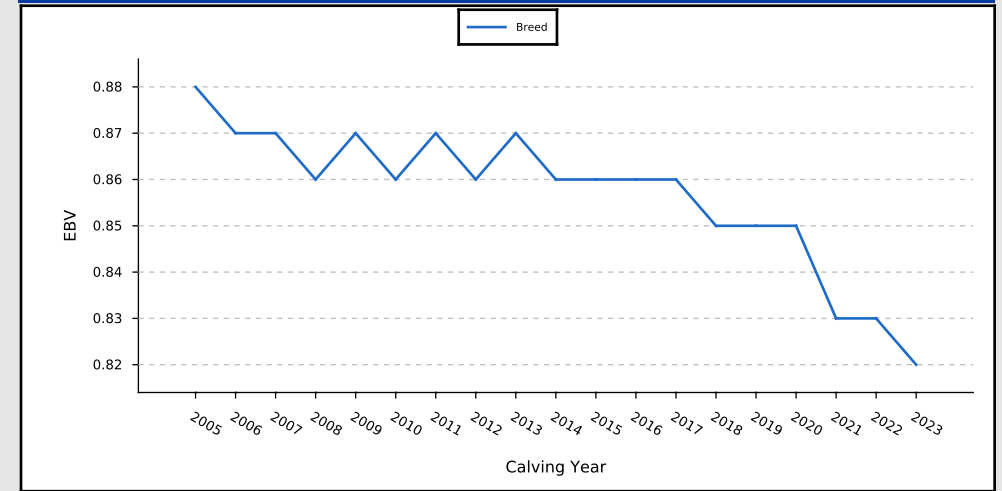
Page: 8

The reports below assess the change in the average EBVs of Angus seedstock animals born in each year for each respective trait.

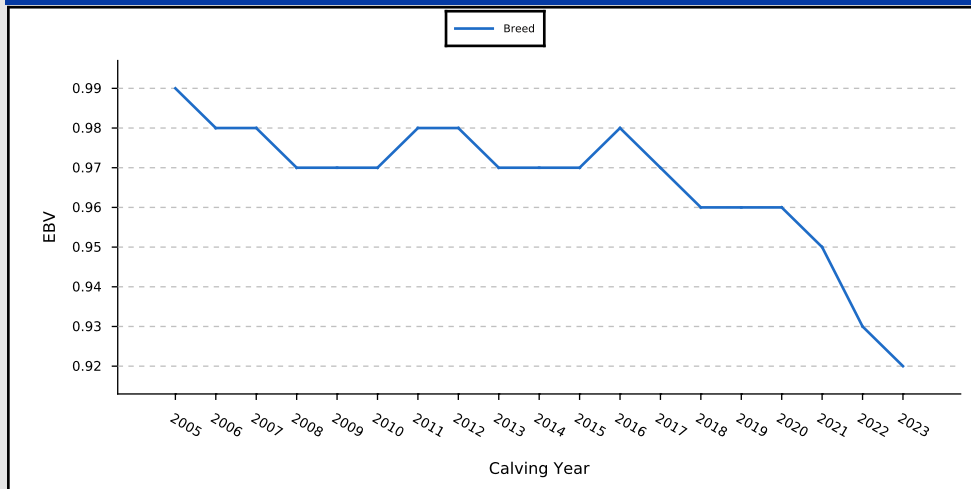
Docility (%)



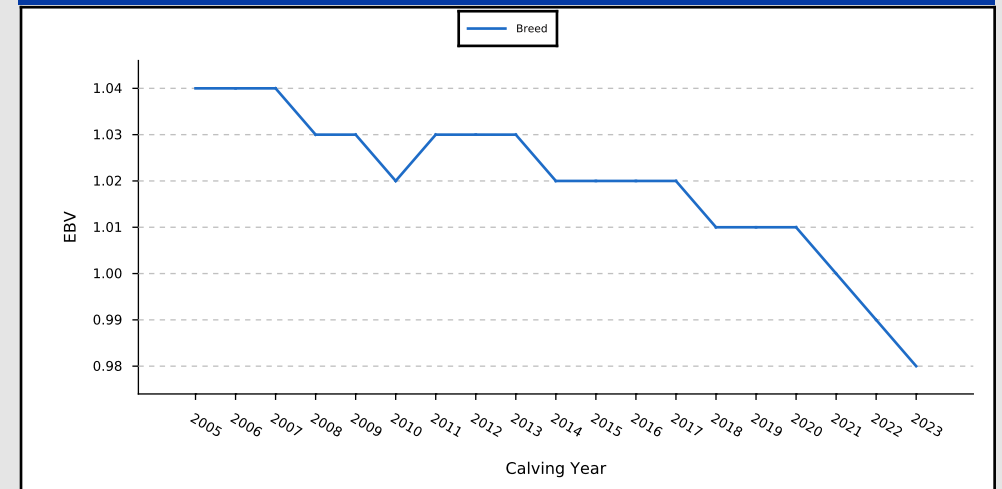
Claw Set (score)



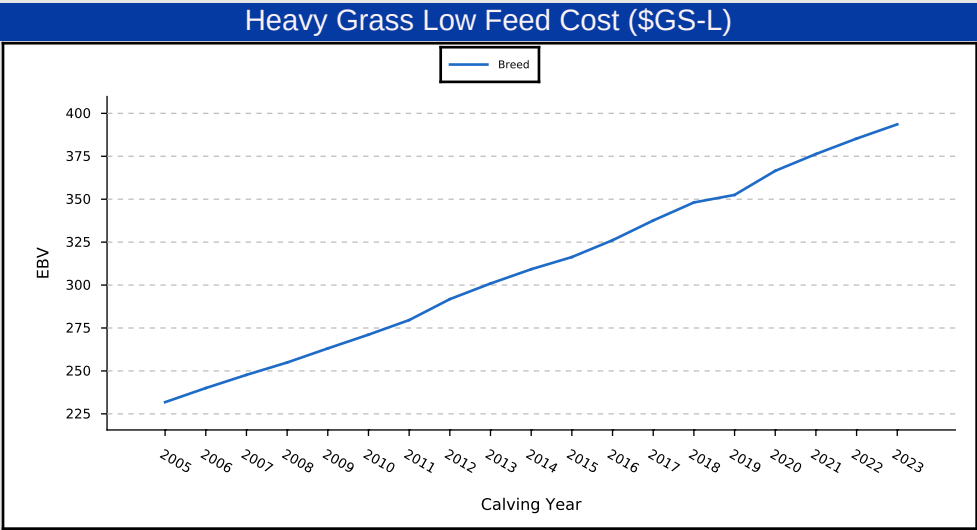
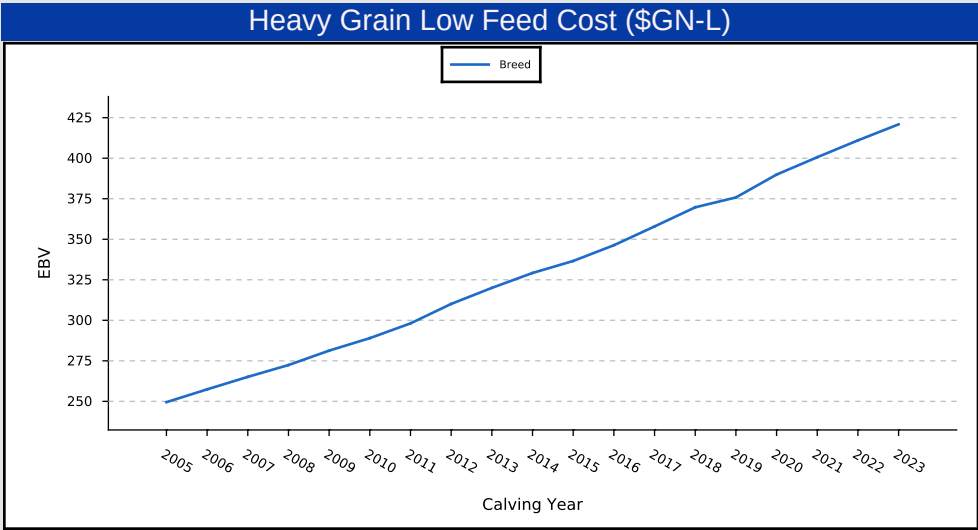
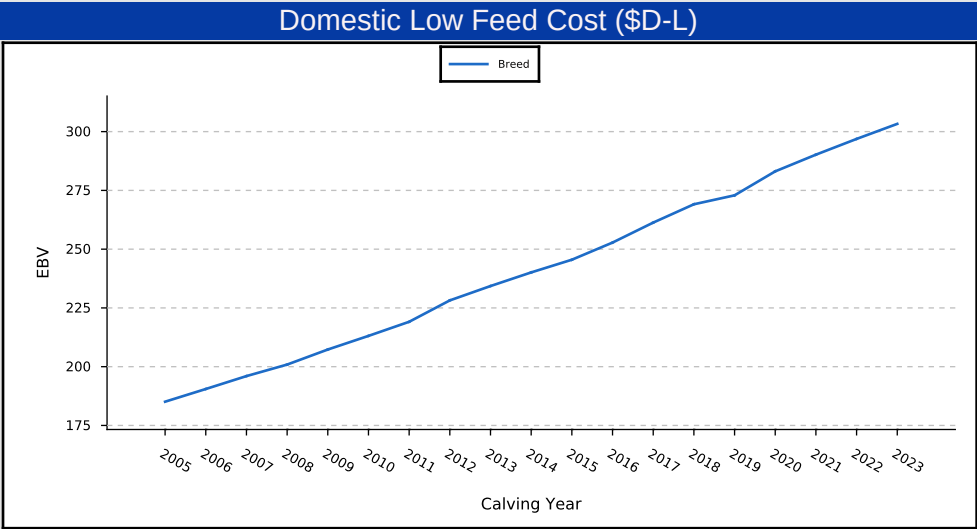
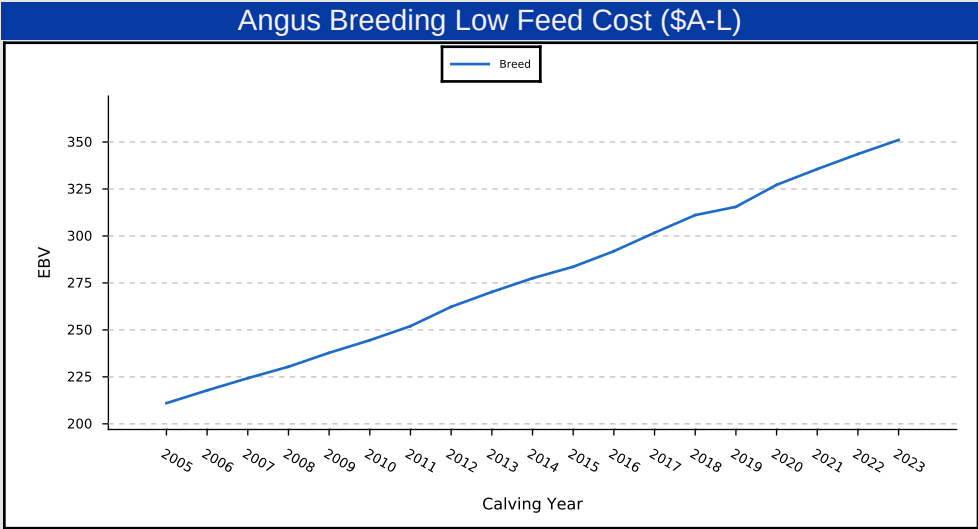
Foot Angle (score)



Leg Angle (score)



The reports below assess the change in the average EBVs of Angus seedstock animals born in each year for each respective trait.



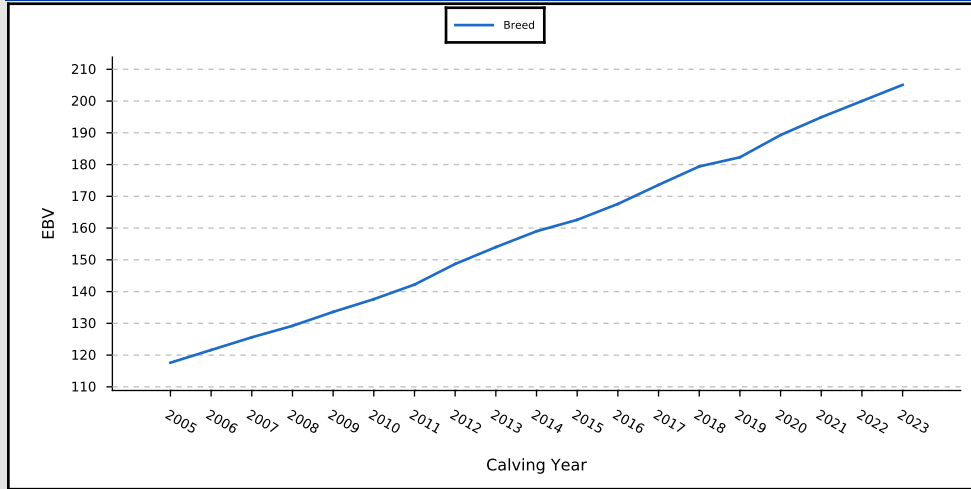
Genetic Progress By Trait

Date: May 26, 2025

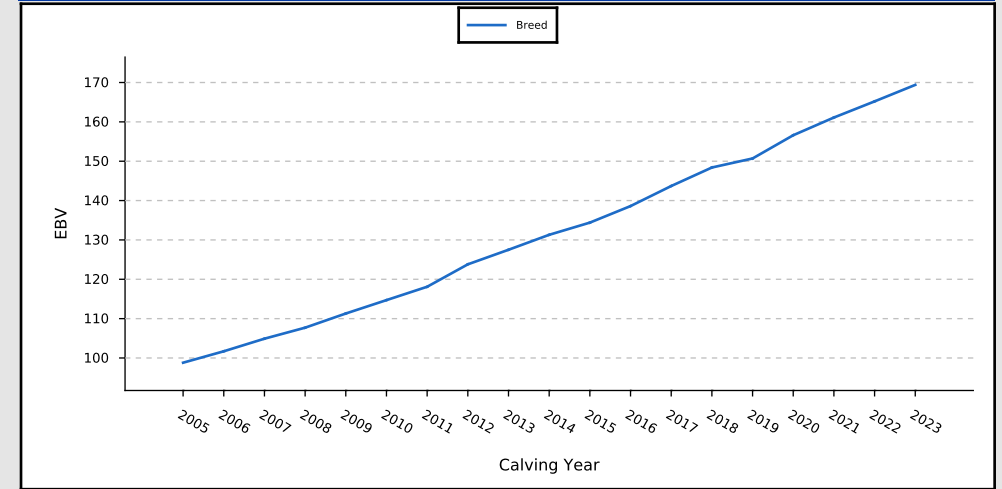
Page: 10

The reports below assess the change in the average EBVs of Angus seedstock animals born in each year for each respective trait.

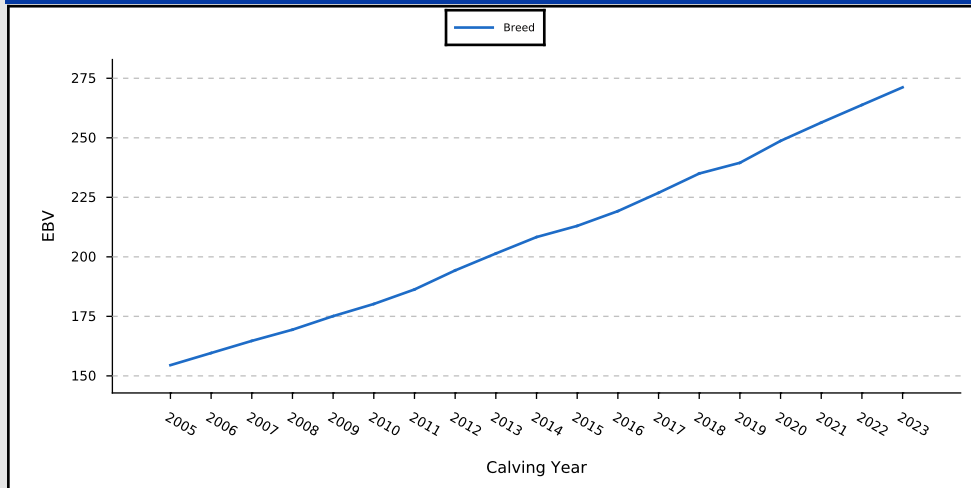
Angus Breeding (\$A)



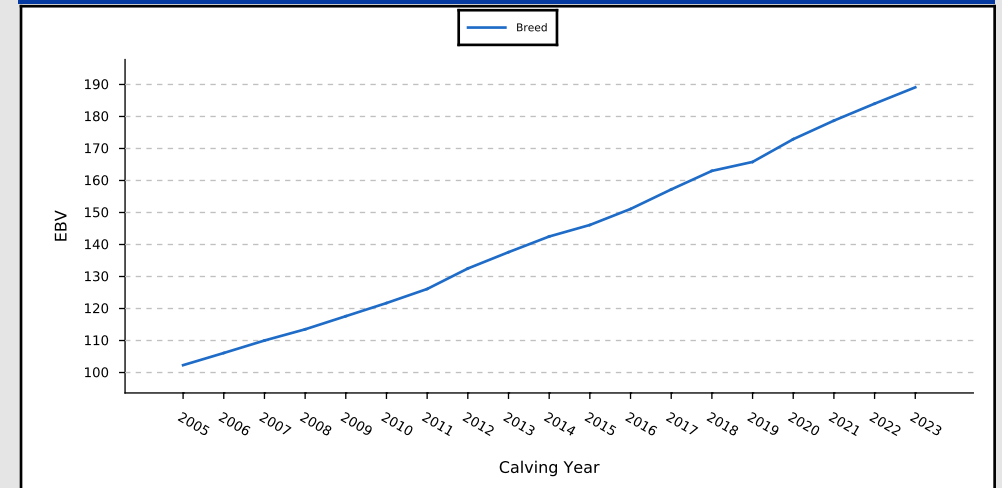
Domestic (\$D)



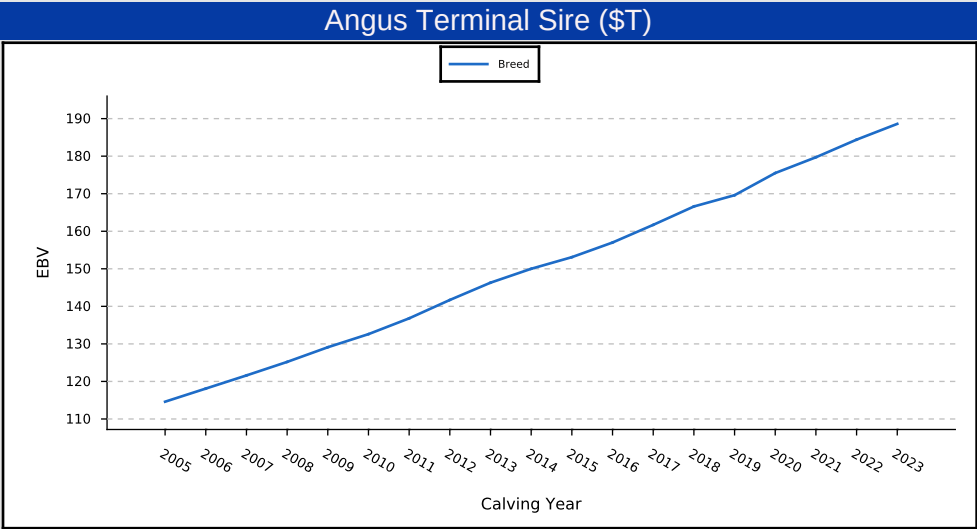
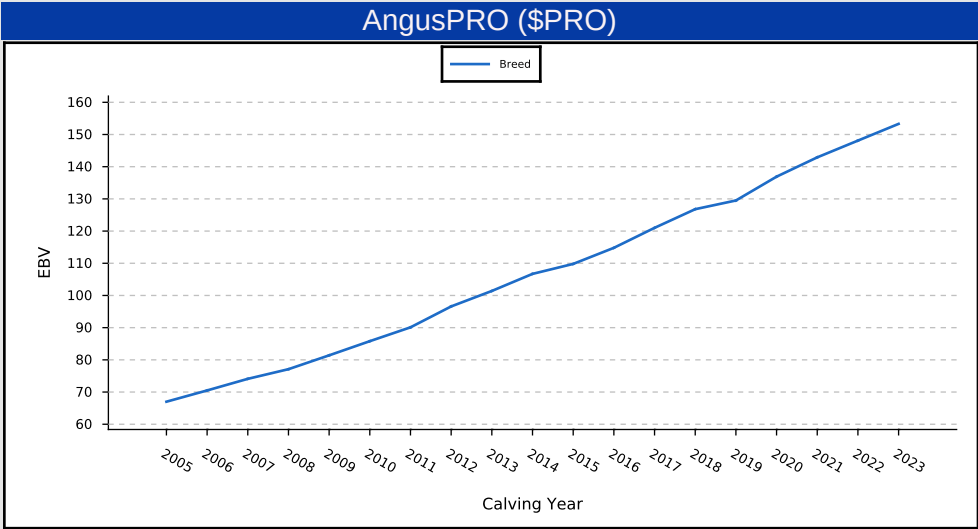
Heavy Grain (\$GN)



Heavy Grass (\$GS)

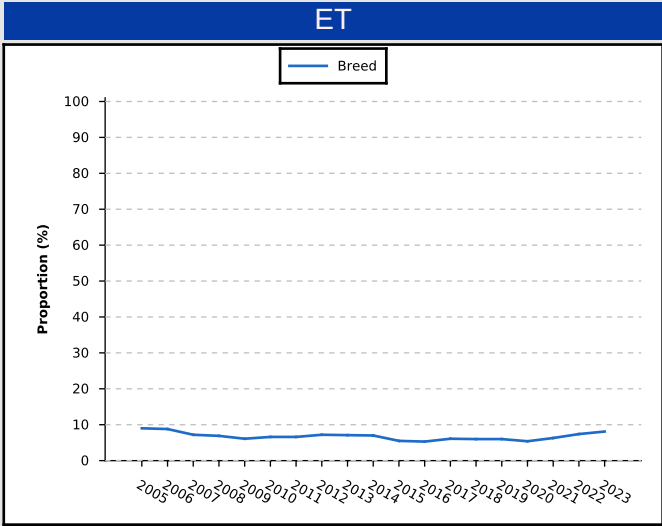
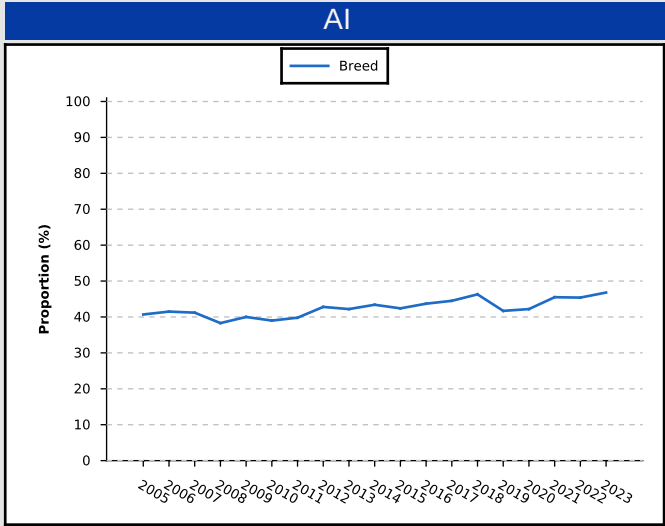
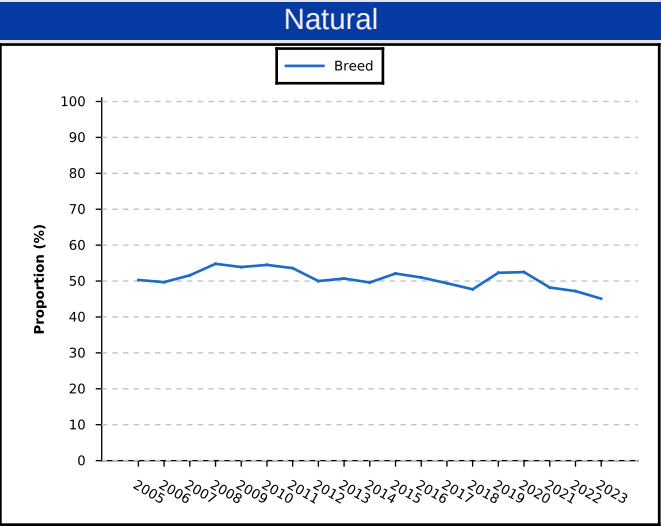
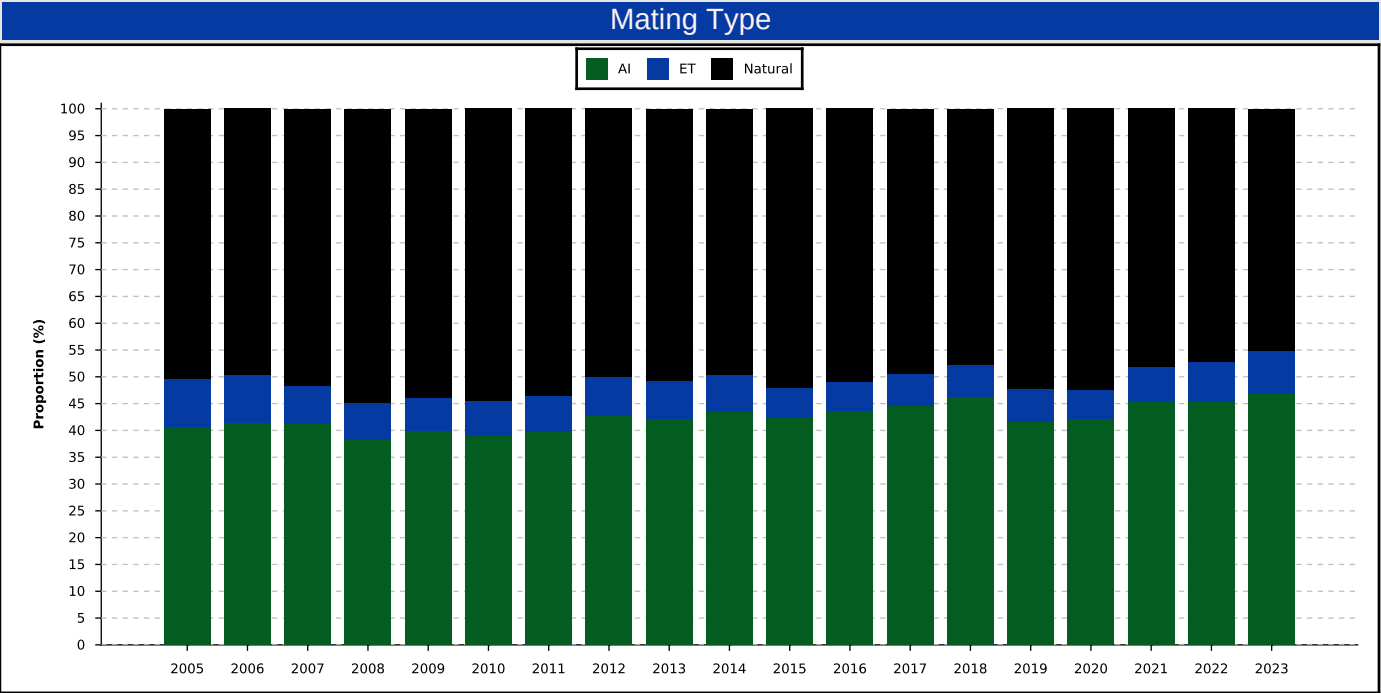


The reports below assess the change in the average EBVs of Angus seedstock animals born in each year for each respective trait.



This report assesses the utilisation of reproductive technologies within the Angus breed by summarising the number of animals born in each year that have been bred by artificial insemination and embryo transfer.

Calving Year	Animals	Mating Type		
		Natural	AI	ET
2005	69678	35045	28355	6278
2006	70738	35134	29346	6258
2007	67437	34812	27766	4859
2008	67838	37151	26004	4683
2009	66747	35985	26698	4064
2010	67429	36730	26272	4427
2011	73575	39416	29283	4876
2012	79641	39825	34102	5714
2013	82017	41574	34649	5794
2014	80899	40133	35120	5646
2015	81593	42491	34582	4520
2016	82594	42090	36097	4407
2017	86111	42539	38298	5274
2018	86988	41459	40314	5215
2019	86795	45405	36179	5211
2020	84160	44149	35478	4533
2021	96946	46727	44157	6062
2022	106266	50174	48259	7833
2023	107417	48410	50289	8718



Generation Length

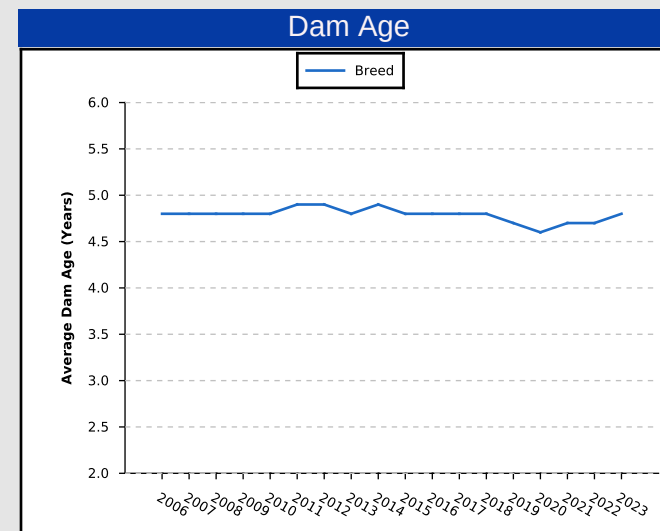
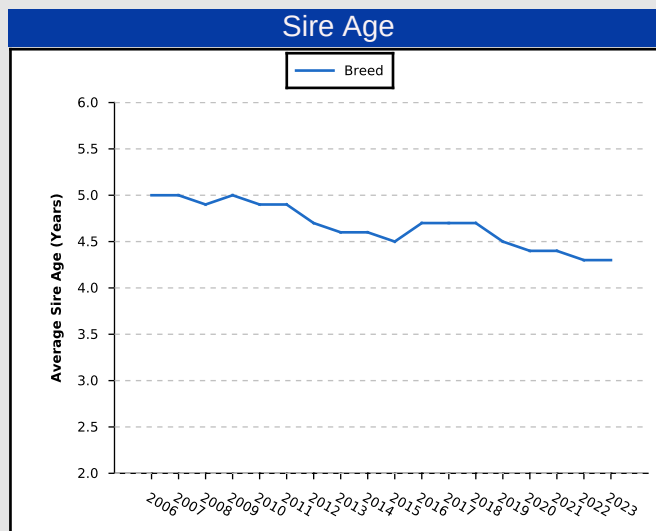
Average Sire and Dam Age By Year

Date: May 26, 2025

Page: 13

This report summarises the average age of the sires and dams of Angus seedstock animals over time. The statistics are calculated as the age of the sire and dam when their progeny are born, and are weighted according to the number of progeny that a sire or dam has in a particular year. For example, if a sire has 50 calves in a particular calving year, its age will make a greater contribution to the average age statistics than a sire with 5 calves.

Calving Year	Animals	Sire Age (Years)				Dam Age (Years)			
		All	Natural	AI	ET	All	Natural	AI	ET
2006	64563	5.0	3.7	6.2	7.7	4.8	4.7	4.4	6.4
2007	62629	5.0	3.7	6.3	7.6	4.8	4.7	4.4	6.4
2008	63359	4.9	3.7	6.4	7.8	4.8	4.8	4.4	6.7
2009	62995	5.0	3.7	6.5	7.9	4.8	4.7	4.5	6.9
2010	63497	4.9	3.7	6.1	7.6	4.8	4.8	4.5	6.5
2011	69742	4.9	3.7	6.1	7.6	4.9	4.9	4.5	6.8
2012	75084	4.7	3.7	5.6	6.7	4.9	4.9	4.5	6.7
2013	77369	4.6	3.7	5.4	6.4	4.8	4.8	4.5	6.8
2014	76300	4.6	3.7	5.4	6.7	4.9	4.9	4.5	6.9
2015	77976	4.5	3.7	5.3	6.7	4.8	4.8	4.5	6.9
2016	78591	4.7	3.8	5.5	6.7	4.8	4.9	4.5	6.8
2017	81179	4.7	3.8	5.5	6.6	4.8	4.8	4.5	6.8
2018	82301	4.7	3.7	5.5	6.5	4.8	4.8	4.4	6.9
2019	82339	4.5	3.6	5.3	6.8	4.7	4.7	4.4	6.5
2020	80583	4.4	3.6	5.2	5.9	4.6	4.7	4.3	6.8
2021	92122	4.4	3.5	5.2	6.5	4.7	4.7	4.3	6.9
2022	99712	4.3	3.5	4.9	5.8	4.7	4.7	4.3	6.8
2023	100254	4.3	3.5	4.8	5.7	4.8	4.7	4.4	6.8



Genetic Diversity

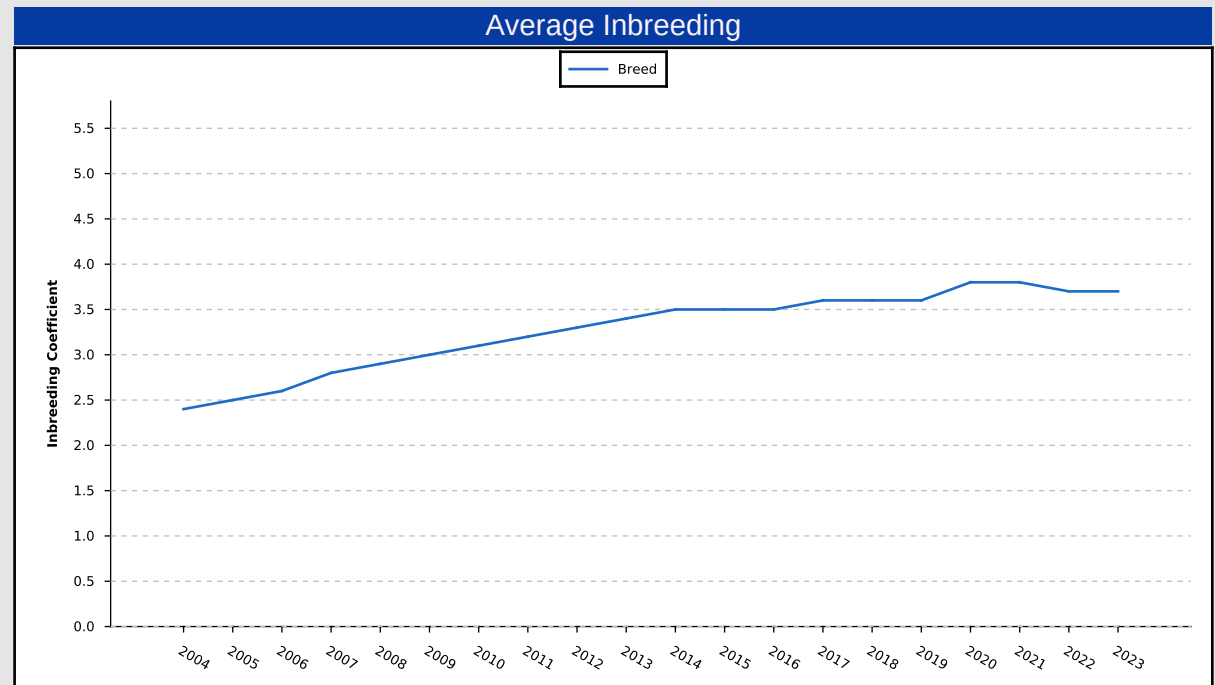
Average Inbreeding By Year

Date: May 26, 2025

Page: 14

This report assesses the genetic diversity within the Angus breed by summarising the average inbreeding co-efficient of animals born in each year.

Calving Year	Animals	Inbreeding Coefficient (%)
		Breed
2004	61502	2.4
2005	63461	2.5
2006	64563	2.6
2007	62629	2.8
2008	63359	2.9
2009	62995	3.0
2010	63497	3.1
2011	69742	3.2
2012	75084	3.3
2013	77369	3.4
2014	76300	3.5
2015	77976	3.5
2016	78591	3.5
2017	81179	3.6
2018	82301	3.6
2019	82339	3.6
2020	80583	3.8
2021	92122	3.8
2022	99712	3.7
2023	100254	3.7



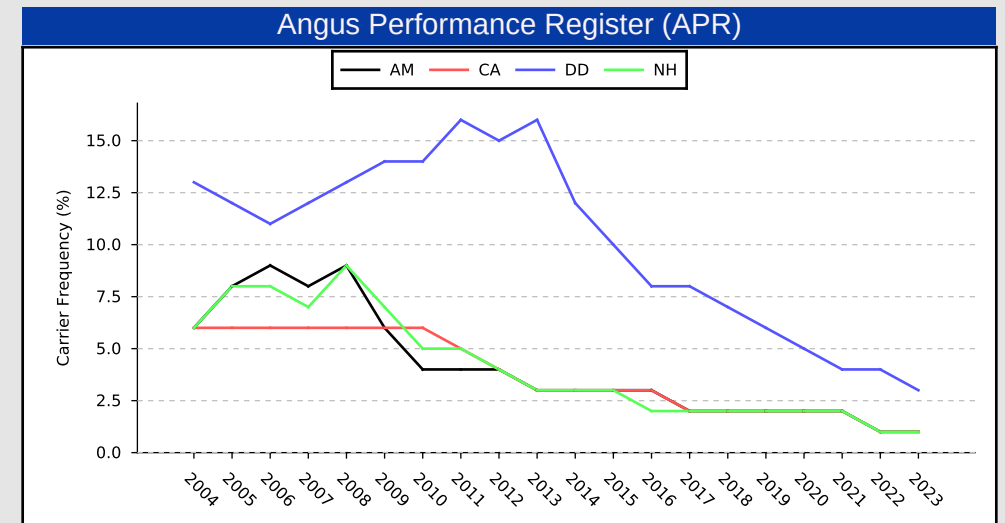
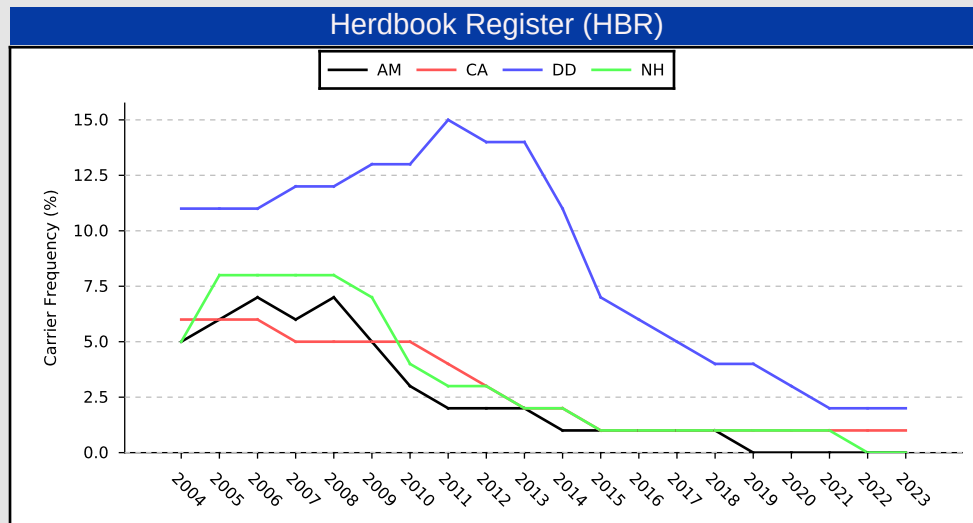
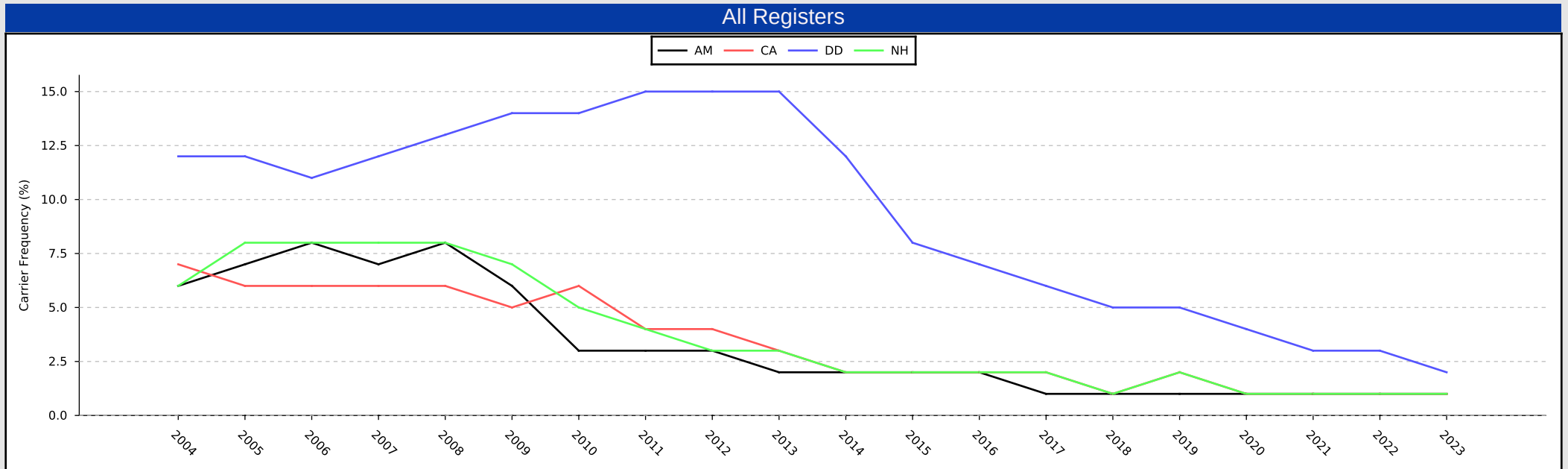
Genetic Conditions

Carrier Frequency By Register

Date: May 26, 2025

Page: 15

This report assesses the frequency of carriers for recessive genetic conditions over time. The statistics are calculated based on the results of the gene probability analyses conducted by Angus Australia.



Appendix 2

Breed Genetic Trends

Date: May 26, 2025

Page: 16

This report provides the average EBVs for all animals recorded with Angus Australia over time.

		Estimated Breeding Values																																	
		Calv-Ease		Birth	Growth			Maternal				Fert		Carcase					Feed	Temp	Structural			Selection Index											
Year	Count	Dir	Dtrs	GL	BW	200	400	600	Mwt	MBC	MCH	Milk	SS	DC	CW	EMA	RIB	P8	RBV	IMF	NFI-F	DOC	Claw	Angle	Leg	\$A	\$D	\$GN	\$GS	\$A-L	\$D-L	\$GN-L	\$GS-L	\$PRO	\$T
2005	63461	-0.1	+0.0	-2.1	+4.2	+33	+60	+78	+69	+0.24	+7.9	+12	+1.2	-3.2	+43	+2.9	+0.2	+0.4	+0.8	+1.1	+0.19	+15	+0.88	+0.99	+1.04	+118	+99	+155	+102	+211	+185	+250	+232	+67	+115
2006	64563	-0.1	+0.0	-2.3	+4.2	+34	+62	+81	+71	+0.24	+8.0	+13	+1.2	-3.3	+44	+3.2	+0.1	+0.3	+0.8	+1.1	+0.18	+16	+0.87	+0.98	+1.04	+122	+102	+160	+106	+218	+191	+257	+240	+71	+118
2007	62629	-0.3	-0.1	-2.3	+4.3	+35	+64	+83	+74	+0.24	+8.1	+13	+1.3	-3.4	+46	+3.3	+0.1	+0.2	+0.8	+1.1	+0.17	+16	+0.87	+0.98	+1.04	+126	+105	+165	+110	+224	+196	+265	+248	+74	+122
2008	63359	-0.4	-0.1	-2.4	+4.4	+36	+66	+86	+76	+0.25	+8.2	+13	+1.3	-3.4	+47	+3.5	-0.1	+0.0	+0.8	+1.2	+0.16	+16	+0.86	+0.97	+1.03	+129	+108	+169	+114	+230	+201	+272	+255	+77	+125
2009	62995	-0.1	+0.2	-2.5	+4.3	+37	+68	+88	+78	+0.25	+8.2	+14	+1.4	-3.5	+49	+3.5	-0.1	+0.0	+0.7	+1.2	+0.13	+17	+0.87	+0.97	+1.03	+134	+111	+175	+118	+238	+207	+281	+263	+81	+129
2010	63497	-0.2	+0.1	-2.6	+4.4	+38	+70	+90	+80	+0.26	+8.3	+14	+1.5	-3.6	+50	+3.7	-0.1	+0.0	+0.7	+1.3	+0.15	+17	+0.86	+0.97	+1.02	+138	+115	+180	+122	+245	+213	+289	+271	+86	+133
2011	69742	+0.0	+0.3	-2.6	+4.4	+39	+71	+93	+82	+0.26	+8.3	+14	+1.5	-3.6	+51	+4.0	-0.2	-0.1	+0.7	+1.4	+0.14	+17	+0.87	+0.98	+1.03	+142	+118	+186	+126	+252	+219	+298	+280	+90	+137
2012	75084	-0.1	+0.3	-2.7	+4.4	+41	+74	+96	+85	+0.27	+8.4	+14	+1.6	-3.8	+53	+4.3	-0.2	-0.2	+0.7	+1.4	+0.14	+17	+0.86	+0.98	+1.03	+149	+124	+194	+133	+262	+228	+310	+292	+97	+142
2013	77369	+0.0	+0.3	-2.9	+4.4	+42	+75	+98	+87	+0.27	+8.4	+14	+1.6	-3.9	+55	+4.5	-0.3	-0.3	+0.7	+1.6	+0.14	+17	+0.87	+0.97	+1.03	+154	+128	+201	+138	+270	+234	+320	+301	+101	+146
2014	76300	+0.3	+0.4	-3.1	+4.3	+42	+77	+100	+88	+0.27	+8.3	+15	+1.6	-4.1	+56	+4.7	-0.1	-0.2	+0.6	+1.7	+0.14	+17	+0.86	+0.97	+1.02	+159	+131	+208	+143	+278	+240	+329	+309	+107	+150
2015	77976	+0.3	+0.9	-3.2	+4.3	+43	+78	+102	+89	+0.27	+8.3	+15	+1.7	-4.1	+57	+4.9	-0.2	-0.3	+0.6	+1.7	+0.15	+18	+0.86	+0.97	+1.02	+163	+134	+213	+146	+284	+246	+337	+316	+110	+153
2016	78591	+0.5	+1.1	-3.4	+4.3	+44	+80	+105	+91	+0.28	+8.3	+15	+1.8	-4.2	+59	+5.0	-0.2	-0.2	+0.6	+1.7	+0.15	+18	+0.86	+0.98	+1.02	+168	+139	+219	+151	+292	+253	+346	+326	+115	+157
2017	81179	+0.8	+1.3	-3.6	+4.3	+46	+82	+107	+93	+0.28	+8.3	+16	+1.8	-4.4	+61	+5.3	-0.1	-0.3	+0.6	+1.8	+0.16	+18	+0.86	+0.97	+1.02	+174	+144	+227	+157	+302	+261	+358	+338	+121	+162
2018	82301	+1.1	+1.8	-3.7	+4.2	+47	+84	+110	+95	+0.29	+8.3	+16	+1.9	-4.5	+62	+5.5	-0.1	-0.3	+0.5	+1.9	+0.17	+18	+0.85	+0.96	+1.01	+179	+148	+235	+163	+311	+269	+370	+348	+127	+167
2019	82339	+1.3	+2.1	-3.8	+4.2	+47	+86	+111	+96	+0.29	+8.3	+16	+1.9	-4.4	+63	+5.6	-0.1	-0.3	+0.5	+2.0	+0.18	+19	+0.85	+0.96	+1.01	+182	+151	+240	+166	+316	+273	+376	+353	+130	+170
2020	80583	+1.4	+2.2	-4.0	+4.1	+49	+88	+115	+99	+0.30	+8.3	+17	+2.0	-4.6	+65	+5.9	-0.1	-0.3	+0.5	+2.1	+0.18	+19	+0.85	+0.96	+1.01	+189	+157	+249	+173	+327	+283	+390	+367	+137	+176
2021	92122	+1.7	+2.5	-4.2	+4.0	+50	+90	+116	+100	+0.30	+8.3	+17	+2.1	-4.7	+66	+6.1	-0.1	-0.3	+0.5	+2.2	+0.21	+20	+0.83	+0.95	+1.00	+195	+161	+256	+179	+336	+290	+401	+376	+143	+180
2022	99712	+1.9	+2.8	-4.4	+4.0	+51	+92	+118	+102	+0.31	+8.2	+17	+2.2	-4.7	+67	+6.4	+0.0	-0.3	+0.4	+2.4	+0.22	+21	+0.83	+0.93	+0.99	+200	+165	+264	+184	+344	+297	+411	+385	+148	+184
2023	10025	+2.2	+3.0	-4.5	+3.9	+52	+93	+120	+102	+0.31	+8.1	+17	+2.2	-4.8	+69	+6.5	+0.0	-0.2	+0.4	+2.5	+0.23	+21	+0.82	+0.92	+0.98	+205	+169	+271	+189	+351	+303	+421	+394	+153	+189

For further information, please contact staff at Angus Australia:
P: 02 6773 4600 | E office@angusaustralia.com.au

www.angusaustralia.com.au

