

Table 1. Merino breed, Merino type and Dohne genetic trends since year 2000. Source: Sheep Genetics (run date 29 August 2023)

Merino breed

Birth yr	BWT	YWT	AWT	YFAT	YEMD	YGFW	ACFW	YFD	YWEC	IMF	SF5	WR	CON	LS	ERA	EBWR	EBCOV	LDAG	LCOL	LFROT	FP+	MP+	DP+
Drop	kg	kg	kg	mm	mm	%	%	micron	%	%	kg	Lamb/Ewe	Ewe Preg	Lamb/Litter	Wean/Born	Sc	Sc	Sc	Sc	Sc	Pts	Pts	Pts
2000	-0.15	0.2	-0.1	0.09	0.25	2.4	4.6	-1.0	6.5	0.04	-0.23	0.01	0.00	0.00	0.00	-0.14	-0.05	0.05	0.08	0.12	118.3	117.9	117.9
2005	-0.09	1.5	1.1	0.11	0.28	3.0	4.8	-1.2	-7.3	-0.02	0.35	0.01	0.02	0.00	0.00	-0.08	-0.07	-0.02	-0.21	-0.05	125.7	126.3	126.3
2010	0.01	2.4	1.8	0.06	0.32	5.3	6.6	-1.3	-7.1	-0.06	0.63	0.00	0.03	0.01	0.01	-0.09	-0.07	-0.03	-0.19	-0.08	129.8	131.8	132.4
2015	0.07	3.5	2.8	0.01	0.29	8.4	9.6	-1.2	-12.7	-0.16	0.90	0.01	0.04	0.02	0.02	-0.10	-0.07	-0.01	-0.18	-0.06	134.2	139.3	140.7
2020	0.15	5.1	4.2	0.03	0.41	12.4	12.6	-1.1	-7.1	-0.24	1.12	0.02	0.07	0.03	0.03	-0.19	-0.10	-0.05	-0.17	-0.07	139.6	149.0	152.9
2021	0.17	5.6	4.6	0.05	0.47	13.6	13.3	-1.0	-9.1	-0.26	1.17	0.02	0.07	0.03	0.03	-0.22	-0.11	-0.07	-0.16	-0.07	141.5	152.2	157.2
Last 20 yrs	0.31	4.8	4.3	-0.06	0.16	10.0	8.0	-0.10	-13.7	-0.29	1.35	0.01	0.06	0.03	0.03	-0.04	-0.05	-0.10	-0.25	-0.19	21.3	31.0	35.0
Last 5 yrs	0.08	1.6	1.4	0.02	0.12	4.0	3.0	0.14	5.5	-0.08	0.22	0.01	0.03	0.01	0.01	-0.09	-0.03	-0.04	0.01	0.00	5.4	9.7	12.2

(a) Superfine Merino type

Birth yr	BWT	YWT	AWT	YFAT	YEMD	YGFW	ACFW	YFD	YWEC	IMF	SF5	WR	CON	LS	ERA	EBWR	EBCOV	LDAG	LCOL	LFROT	FP+	MP+	DP+
2000	-0.23	-2.7	-3.0	0.50	0.56	-10.7	-7.3	-1.7	-9.0	0.27	-0.98	0.00	0.01	0.01	-0.01	-0.06	0.10	0.04	-0.98	-0.60	114.5	103.3	101.5
2005	-0.22	-2.3	-2.7	0.40	0.34	-8.7	-5.4	-2.0	-13.5	0.28	-0.68	0.00	0.01	-0.01	0.00	-0.08	0.03	0.03	-0.76	-0.38	122.2	112.9	109.6
2010	-0.07	-0.7	-1.4	0.09	0.20	-3.4	-0.9	-2.1	-16.0	0.13	-0.10	0.00	0.00	0.01	-0.01	0.11	0.08	-0.05	-0.59	-0.27	129.2	122.2	118.1
2015	-0.01	0.5	-0.3	-0.01	0.19	0.5	3.2	-2.0	-16.4	0.05	0.23	0.02	0.01	0.03	0.00	0.23	0.14	-0.02	-0.80	-0.32	135.7	131.2	127.1
2020	0.07	2.3	1.2	0.04	0.26	6.3	7.6	-1.8	-9.8	-0.08	0.55	0.08	0.02	0.06	0.01	0.20	0.07	-0.05	-0.67	-0.27	141.7	142.4	140.8
2021	0.08	3.1	1.9	0.07	0.32	7.9	8.7	-1.6	-10.3	-0.13	0.69	0.07	0.02	0.06	0.00	0.11	0.05	-0.06	-0.58	-0.25	142.6	145.0	144.8
Last 20 yrs	0.29	5.0	4.2	-0.46	-0.30	17.1	14.9	-0.10	-0.9	-0.35	1.54	0.08	0.01	0.05	0.02	0.25	-0.04	-0.09	0.31	0.33	27.2	39.1	39.3
Last 5 yrs	0.07	1.8	1.4	0.05	0.07	5.8	4.4	0.24	6.6	-0.13	0.32	0.05	0.01	0.03	0.01	-0.04	-0.08	-0.02	0.13	0.05	6.0	11.3	13.7

(b) Fine Merino type

Birth yr	BWT	YWT	AWT	YFAT	YEMD	YGFW	ACFW	YFD	YWEC	IMF	SF5	WR	CON	LS	ERA	EBWR	EBCOV	LDAG	LCOL	LFROT	FP+	MP+	DP+
2000	-0.15	0.8	0.3	-0.06	0.13	6.8	8.7	-0.8	15.4	0.01	-0.25	-0.01	0.01	0.00	0.00	-0.03	-0.03	0.02	0.09	0.15	120.8	123.6	122.9
2005	-0.05	2.1	1.6	0.01	0.21	7.2	8.8	-1.0	-3.5	-0.09	0.58	0.02	0.01	0.03	-0.01	-0.04	-0.08	-0.03	-0.18	-0.04	128.5	131.7	130.6
2010	0.02	2.6	2.0	0.02	0.28	8.2	9.5	-1.2	-2.7	-0.05	0.64	0.05	0.00	0.04	0.01	-0.07	-0.08	-0.03	-0.18	-0.08	133.4	137.0	136.4
2015	0.07	3.7	2.9	-0.02	0.23	10.2	10.6	-1.2	-13.0	-0.14	0.91	0.08	0.01	0.06	0.02	-0.09	-0.12	-0.02	-0.15	-0.04	137.5	143.3	143.9
2020	0.17	5.2	4.3	-0.11	0.26	14.5	14.2	-1.2	-7.8	-0.24	1.26	0.12	0.03	0.08	0.03	-0.08	-0.06	-0.05	-0.19	-0.07	143.7	154.0	156.4
2021	0.20	5.7	4.7	-0.10	0.27	15.8	15.2	-1.2	-7.5	-0.27	1.34	0.13	0.03	0.09	0.02	-0.08	-0.06	-0.07	-0.21	-0.06	146.1	157.6	160.7
Last 20 yrs	0.32	4.3	3.9	-0.05	0.13	7.7	5.4	-0.37	-23.1	-0.25	1.51	0.13	0.02	0.09	0.03	-0.05	-0.03	-0.07	-0.28	-0.21	22.9	30.4	33.4
Last 5 yrs	0.10	1.5	1.3	-0.09	0.03	4.4	3.5	0.04	5.3	-0.10	0.35	0.04	0.01	0.02	0.01	0.01	0.06	-0.03	-0.04	-0.02	6.2	10.7	12.4

(c) Medium Merino type

Birth yr	BWT	YWT	AWT	YFAT	YEMD	YGFW	ACFW	YFD	YWEC	IMF	SF5	WR	CON	LS	ERA	EBWR	EBCOV	LDAG	LCOL	LFROT	FP+	MP+	DP+
2000	-0.10	2.6	3.2	-0.33	-0.19	8.0	8.9	0.3	-0.7	-0.26	2.07	0.09	0.02	0.02	0.03	-0.44	-0.18	0.20	0.40	0.10	107.8	118	126.3
2005	-0.01	3.9	4.0	-0.08	0.24	8.5	8.9	-0.3	-2.7	-0.18	1.38	0.10	0.03	0.04	0.04	-0.34	-0.15	0.10	0.23	0.06	119.9	129	136.2
2010	0.07	4.7	4.4	0.11	0.54	6.4	7.2	-0.7	-19.6	-0.23	1.36	0.09	0.01	0.04	0.03	-0.39	-0.13	-0.01	0.13	0.07	122.9	131	137.4
2015	0.16	4.6	4.2	-0.09	0.28	9.9	12.1	-0.8	-2.4	-0.28	1.30	0.04	0.00	0.00	0.04	-0.38	-0.10	0.05	0.17	0.12	131.9	140	143.9
2020	0.24	6.1	5.5	-0.11	0.35	14.0	15.1	-0.8	7.4	-0.39	1.76	0.09	0.01	0.03	0.04	-0.44	-0.20	-0.02	0.07	0.05	137.8	150	154.7
2021	0.24	6.5	5.7	-0.03	0.49	14.3	14.9	-0.8	-0.8	-0.38	1.65	0.11	0.02	0.05	0.04	-0.48	-0.19	-0.03	0.09	0.05	138.9	152	157.9
Last 20 yrs	0.34	3.5	2.2	0.22	0.54	6.1	6.2	-1.15	8.1	-0.13	-0.31	-0.01	-0.01	0.01	0.01	0.01	-0.02	-0.22	-0.33	-0.05	30.0	31.7	28.4
Last 5 yrs	0.08	1.6	1.3	-0.02	0.08	4.1	2.9	-0.03	9.9	-0.11	0.46	0.04	0.01	0.03	0.00	-0.06	-0.10	-0.07	-0.10	-0.07	5.9	9.5	10.8

Dohne breed

Birth yr	BWT	YWT	AWT	YFAT	YEMD	YGFW	ACFW	YFD	YWEC	EBWR	EBCOV	LDAG	LCOL	LFROT	DOHNE+
2000	-0.02	-0.1	-0.1	0.15	0.06	1.0	0.2	0.2	-5.7	0.03	0.02	0.10	0.08	0.04	100.1
2005	0.11	1.1	1.1	0.15	0.41	0.7	0.8	0.0	-0.3	-0.01	0.04	0.08	-0.16		106.2
2010	0.18	2.7	2.6	0.13	0.51	1.5	1.1	-0.2	4.1	-0.07	0.00	0.04	-0.02		119.0
2015	0.25	3.9	3.6	0.08	0.58	4.3	2.9	-0.3	10.3	-0.06	-0.02	0.05	-0.04	0.00	129.4
2020	0.32	5.2	4.8	0.09	0.69	7.2	5.2	-0.3	15.0	-0.12	-0.09	0.01	-0.08	-0.09	142.2
2021	0.35	5.4	5.0	0.11	0.77	7.2	5.3	-0.3	15.3	-0.09	-0.10	0.00	-0.11	-0.09	144.7
Last 20 yrs	0.35	5.3	4.8	-0.06	0.63	6.1	5.0	-0.49	20.7	-0.15	-0.11	-0.08	-0.16	-0.14	42.1
Last 5 yrs	0.07	1.3	1.1	0.02	0.11	2.9	2.3	-0.03	4.7	-0.06	-0.06	-0.03	-0.04	-0.10	12.8

Table 2. Number of Merinos in MERINOSELECT recorded overall, and for Worm Egg Count, Breech Wrinkle and Dag since the year 2000. Source: Sheep Genetics. (Note: cull animals not included)

Year of birth	Animals recorded	YWEC records	EBWR records	LDAG records
2000	20,638	2,804	0	80
2005	39,460	3,992	676	1,677
2010	55,722	3,852	9,747	3,409
2015	103,723	7,422	13,194	9,690
2020	158,341	10,722	50,283	16,926

ASBV abbreviations: BWT birth weight, YWT yearling weight, YFAT yearling fat, YEMD yearling muscle, YGFW yearling greasy fleece weight, ACFW adult clean fleece weight, YFD yearling fibre diameter, YWEC yearling worm egg count, IMF intramuscular fat, SF5 shear force, WR weaning rate, CON conception, LS litter size, ERA ewe rearing ability, EBWR early breech wrinkle, EBCOV early breech cover, LDAG late dag, LCOL late wool colour, LFROT late fleece rot, FP+ fibre production plus index, MP+ merino production plus index, DP+ dual purpose production plus index.