

**Provincial genetic trends by birth year for Milking Shorthorn cows
Lactanet Canada, August 2021**

Prince Edward Island

Year	Cows	LPI	Milk	Fat	Protein	Fat%	Protein%	Pers	SCS	Conf	DS	F&L	MS	Rump	HL	DF	DCA
2008	15	1216	340	2.7	6.2	-0.18	-0.06	102.1	102.1	-2.0	-2.4	-1.7	-1.5	-0.9	99.0	100.5	100.6
2009	15	1250	105	5.3	-1.3	0.02	-0.09	100.1	99.7	1.3	-0.3	2.3	0.9	1.9	99.3	101.0	98.4
2010	14	1126	21	-1.6	-2.1	-0.03	-0.06	99.2	101.1	-0.8	-2.2	-1.4	-0.1	0.1	99.1	100.8	99.2
2011	21	1426	18	11.2	0.2	0.17	-0.00	101.2	99.2	3.5	1.3	3.0	3.7	3.2	100.6	100.9	96.7
2012	12	1198	74	-0.3	0.1	-0.05	-0.04	99.2	101.7	-0.3	-1.9	-0.6	0.3	-0.2	99.8	100.0	96.7
2013	21	1519	94	15.6	4.2	0.19	0.04	102.0	101.0	3.2	1.5	1.8	3.3	3.2	101.4	100.2	98.7
2014	12	1597	176	13.0	6.2	0.09	0.03	101.8	101.8	5.1	3.7	1.8	5.2	2.8	102.3	101.0	100.0
2015	19	1470	281	9.6	5.6	-0.03	-0.04	99.8	101.0	3.6	2.7	0.3	4.4	-0.3	101.0	101.5	101.5
2016	23	1555	235	10.4	5.3	0.01	-0.02	101.3	102.8	4.3	1.8	0.6	5.5	1.9	103.1	101.2	100.3
2017	14	1530	118	8.5	4.8	0.06	0.04	101.8	101.8	5.1	4.0	1.9	5.1	2.0	102.6	99.6	.
2018	16	1645	246	10.5	7.1	0.00	0.01	101.8	102.9	6.2	4.5	3.1	6.4	2.9	103.4	100.7	.

Notes:

1. Based on all cows with both production and type indexes.
2. Production in kg EBV units and conformation in EBV points.
3. Conformation indexes based on first lactation classifications of each cow.

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Nova Scotia

Year	Cows	LPI	Milk	Fat	Protein	Fat%	Protein%	Pers	SCS	Conf	DS	F&L	MS	Rump	HL	DF	DCA
2008	1	1192	201	-6.0	1.0	-0.23	-0.10	102.0	103.0	1.0	0.0	-1.0	2.0	3.0	99.0	100.0	101.0
2010	1	1119	-229	-15.0	-8.0	-0.08	-0.05	99.0	105.0	1.0	-2.0	-1.0	1.0	2.0	101.0	103.0	.
2011	1	2028	591	28.0	18.0	0.04	0.07	102.0	102.0	10.0	8.0	7.0	9.0	3.0	105.0	99.0	.
2012	2	1151	67	-3.0	-4.0	-0.09	-0.13	100.5	101.0	0.5	-2.5	-1.0	1.0	-0.5	101.0	104.0	104.0
2013	2	1291	166	2.0	0.5	-0.08	-0.10	100.0	101.0	0.5	-1.0	-2.0	2.5	-1.5	102.0	103.0	99.5
2014	5	1386	-21	8.0	-0.6	0.15	0.00	102.8	100.4	2.2	-0.8	2.8	2.2	2.2	102.4	100.5	99.0
2015	1	948	-109	-8.0	-6.0	-0.06	-0.07	102.0	98.0	-1.0	-4.0	-1.0	-2.0	1.0	100.0	.	.
2016	1	1258	-354	3.0	-2.0	0.31	0.17	102.0	96.0	4.0	0.0	3.0	5.0	5.0	97.0	94.0	.
2017	2	1277	236	11.0	2.5	0.02	-0.08	102.5	102.0	-0.5	-2.0	-0.5	-0.5	-0.5	100.0	.	.

Notes:

1. Based on all cows with both production and type indexes.
2. Production in kg EBV units and conformation in EBV points.
3. Conformation indexes based on first lactation classifications of each cow.

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New Brunswick

Year	Cows	LPI	Milk	Fat	Protein	Fat%	Protein%	Pers	SCS	Conf	DS	F&L	MS	Rump	HL	DF	DCA
2008	3	1098	-25	-7.0	-1.0	-0.09	-0.01	100.0	103.7	-0.3	-1.0	0.0	-1.7	-0.7	98.3	99.0	99.0
2010	1	1245	-118	6.0	-4.0	0.19	-0.01	99.0	102.0	0.0	-1.0	-2.0	0.0	-1.0	99.0	103.0	.
2011	3	1330	390	7.0	7.3	-0.16	-0.06	103.0	107.3	-2.0	-2.3	-2.0	-2.3	0.0	100.0	101.0	96.0
2013	1	1462	426	25.0	6.0	0.09	-0.11	104.0	102.0	0.0	-2.0	-1.0	1.0	4.0	101.0	100.0	.
2014	2	1315	489	7.5	8.5	-0.22	-0.10	102.0	108.0	-1.5	-2.5	-1.5	-2.5	1.0	99.5	101.0	98.0
2015	1	1302	244	5.0	4.0	-0.09	-0.06	102.0	104.0	0.0	-1.0	-2.0	0.0	-2.0	102.0	.	.
2018	2	1430	210	10.5	1.0	0.03	-0.10	100.5	100.0	2.5	-2.5	0.5	3.5	2.0	105.0	104.0	102.5

Notes:

1. Based on all cows with both production and type indexes.
2. Production in kg EBV units and conformation in EBV points.
3. Conformation indexes based on first lactation classifications of each cow.

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Quebec

Year	Cows	LPI	Milk	Fat	Protein	Fat%	Protein%	Pers	SCS	Conf	DS	F&L	MS	Rump	HL	DF	DCA
2008	5	941	-114	-10.0	-3.4	-0.08	-0.00	101.0	100.6	-4.4	-5.6	-4.2	-3.2	-3.0	98.2	100.0	99.0
2009	2	1051	229	-0.5	2.0	-0.17	-0.10	100.0	101.0	-4.0	-1.0	-5.0	-3.0	0.5	95.5	.	.
2010	3	1051	-256	-4.0	-7.0	0.12	-0.01	100.0	97.3	0.7	-2.7	-1.3	3.0	-3.3	98.3	100.5	98.7
2011	8	1164	-28	-2.0	-2.5	-0.00	-0.04	99.5	100.6	0.3	-1.6	0.5	0.3	0.6	99.9	102.0	99.0
2012	5	1164	-47	-4.2	-4.8	-0.03	-0.08	97.6	98.8	1.8	-1.6	0.0	3.0	-2.0	102.2	102.8	101.4
2013	5	1153	-271	-2.4	-7.4	0.16	-0.00	98.6	98.4	2.0	-1.2	0.8	3.2	-0.4	100.2	103.0	98.8
2014	4	1141	119	-0.5	-0.5	-0.09	-0.08	100.8	102.0	-1.5	-4.0	-0.8	-1.5	0.5	101.5	102.0	101.0
2015	4	1186	-79	3.5	-2.8	0.12	-0.02	101.5	98.8	0.3	-2.3	-0.8	1.0	-0.8	100.5	104.0	.
2016	3	1461	169	5.0	2.7	-0.03	-0.04	101.7	102.0	4.7	1.0	3.3	4.0	1.7	104.0	104.0	96.0
2017	2	1243	-59	-2.0	-2.0	0.02	-0.01	100.5	100.5	2.0	-2.0	1.5	2.5	3.5	102.5	.	.
2018	5	1365	16	4.4	0.8	0.06	0.01	103.0	102.0	2.8	2.4	0.4	2.4	1.8	101.2	.	.

Notes:

1. Based on all cows with both production and type indexes.
2. Production in kg EBV units and conformation in EBV points.
3. Conformation indexes based on first lactation classifications of each cow.

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Ontario

Year	Cows	LPI	Milk	Fat	Protein	Fat%	Protein%	Pers	SCS	Conf	DS	F&L	MS	Rump	HL	DF	DCA
2008	104	1070	-3	-9.2	-1.0	-0.14	-0.02	99.9	99.6	-0.6	-1.2	-0.9	-0.1	-1.0	99.2	100.2	99.0
2009	94	1123	-58	-6.1	-2.1	-0.05	-0.01	100.2	100.4	-0.2	-1.1	-0.6	0.3	-0.2	99.6	100.0	98.6
2010	119	1127	-26	-4.3	-0.8	-0.05	-0.00	100.9	99.8	-0.6	-1.5	-0.2	-0.4	-0.2	99.5	100.3	100.4
2011	107	1239	50	-1.4	0.8	-0.05	-0.01	101.0	100.2	1.0	0.3	0.5	1.3	0.1	100.0	100.8	99.9
2012	101	1214	-40	-2.8	-0.9	-0.01	0.01	100.5	99.8	1.3	0.1	0.7	1.6	1.7	100.2	99.8	100.0
2013	95	1214	-93	-4.5	-2.0	-0.00	0.01	100.4	99.6	1.5	0.1	1.4	1.6	1.4	101.0	100.3	99.9
2014	79	1337	92	2.7	1.8	-0.02	-0.01	101.7	101.2	1.8	0.5	0.6	2.2	1.1	101.3	101.8	101.6
2015	96	1308	-23	-2.5	-0.6	-0.02	0.00	100.6	101.0	2.9	1.6	1.5	3.1	1.1	101.9	101.9	101.4
2016	80	1418	38	5.6	2.3	0.07	0.03	102.0	102.1	3.1	1.7	1.4	3.1	1.5	101.5	99.8	98.0
2017	84	1398	56	2.0	1.4	-0.00	0.00	101.6	101.6	3.5	2.6	2.2	3.4	2.2	102.1	102.4	.
2018	50	1423	65	3.5	2.2	0.02	0.01	102.5	100.7	4.1	2.6	2.3	3.8	2.8	102.0	100.7	98.7

Notes:

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2. Production in kg EBV units and conformation in EBV points.
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Manitoba

Year	Cows	LPI	Milk	Fat	Protein	Fat%	Protein%	Pers	SCS	Conf	DS	F&L	MS	Rump	HL	DF	DCA
2008	17	1160	-28	-5.4	-0.8	-0.07	0.00	100.5	101.9	-0.4	-0.4	-0.9	-0.2	-1.4	99.7	100.8	98.8
2009	24	1265	31	1.1	0.5	-0.00	-0.01	100.0	100.9	1.7	0.9	-0.7	2.3	0.5	99.8	99.8	98.1
2010	24	1129	-152	-7.5	-4.8	-0.01	-0.02	98.0	100.5	1.5	0.3	-1.8	2.5	0.3	99.9	101.5	100.6
2011	27	1276	56	1.3	0.3	-0.01	-0.03	99.6	100.9	2.6	1.9	-1.0	3.3	0.6	99.3	100.5	100.8
2012	37	1368	0	5.6	1.4	0.09	0.03	101.1	100.6	2.4	1.3	-0.3	3.0	1.3	100.9	102.5	101.2
2013	24	1316	108	2.5	2.9	-0.03	0.01	101.3	99.9	1.5	-0.2	-0.3	2.5	1.1	100.4	101.0	101.0
2014	22	1262	12	-0.9	0.6	-0.02	0.01	101.2	101.0	1.5	0.7	-0.1	1.9	-0.5	99.8	102.0	99.0
2015	32	1434	8	4.8	0.7	0.07	0.02	101.0	100.4	4.8	3.2	2.2	4.8	2.1	101.8	100.7	99.8
2016	19	1349	45	5.7	3.0	0.06	0.04	102.7	100.4	1.3	0.1	-0.2	2.2	-0.7	100.5	101.5	99.5
2017	12	1116	-49	-10.6	-2.3	-0.13	-0.02	99.7	98.3	1.7	1.8	0.3	1.3	0.8	99.6	.	.
2018	11	1177	-13	0.0	0.7	0.01	0.03	99.6	98.6	-0.1	1.5	-1.0	0.0	-0.1	97.9	.	.

Notes:

1. Based on all cows with both production and type indexes.
2. Production in kg EBV units and conformation in EBV points.
3. Conformation indexes based on first lactation classifications of each cow.

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Alberta

Year	Cows	LPI	Milk	Fat	Protein	Fat%	Protein%	Pers	SCS	Conf	DS	F&L	MS	Rump	HL	DF	DCA
2008	7	1019	61	-13.4	-1.1	-0.26	-0.07	97.9	98.3	-0.1	-0.9	-0.3	0.1	-0.1	99.7	103.0	.
2009	7	1161	-112	-8.9	-0.7	-0.06	0.05	99.7	99.9	0.6	0.3	0.3	0.9	1.7	100.4	106.0	.
2010	5	1084	-18	-8.4	-1.4	-0.12	-0.02	98.4	98.4	0.8	0.4	-0.6	1.4	1.2	98.4	99.0	.
2011	1	1355	296	17.0	2.0	0.06	-0.12	102.0	108.0	-2.0	0.0	-1.0	-3.0	4.0	100.0	104.0	.
2012	1	1324	486	5.0	7.0	-0.25	-0.11	100.0	105.0	1.0	2.0	0.0	0.0	1.0	103.0	.	.
2014	2	1295	88	1.0	0.0	-0.05	-0.06	100.5	100.0	2.0	-1.0	2.5	1.5	-0.5	103.0	.	.
2017	1	1344	221	8.0	6.0	-0.02	0.00	101.0	99.0	3.0	2.0	2.0	2.0	-3.0	94.0	.	.

Notes:

1. Based on all cows with both production and type indexes.
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