

**Provincial genetic trends by birth year for Milking Shorthorn cows
Lactanet Canada, August 2019**

Prince Edward Island

Year	Cows	LPI	Milk	Fat	Protein	Fat%	Protein%	Pers	SCS	Conf	DS	F&L	MS	Rump	HL	DF	DCA
2006	16	1117	78	-4.7	0.4	-0.14	-0.04	100.1	102.2	-1.8	-1.9	-2.4	-1.4	0.1	100.6	100.8	100.3
2007	7	1060	156	-7.9	2.9	-0.25	-0.03	99.9	99.3	-1.9	-2.0	-0.9	-1.6	0.4	99.6	99.2	98.7
2008	15	1195	338	2.3	6.0	-0.21	-0.07	101.9	101.9	-1.8	-2.1	-1.5	-1.5	-0.3	99.1	100.1	100.5
2009	15	1236	101	6.2	-1.3	0.04	-0.09	99.8	99.1	1.1	-0.1	2.5	0.7	2.0	99.2	100.7	98.6
2010	14	1133	20	-1.0	-1.9	-0.02	-0.05	98.8	100.6	-0.7	-2.0	-1.1	-0.1	0.6	99.8	100.6	99.3
2011	21	1430	44	12.6	0.8	0.19	-0.01	101.0	99.2	3.5	1.5	3.3	3.4	3.7	100.6	100.9	96.8
2012	12	1214	108	0.9	0.9	-0.06	-0.04	99.0	101.7	0.0	-1.6	-0.1	0.1	0.1	100.1	100.4	98.0
2013	21	1547	214	17.8	6.0	0.15	0.01	101.7	101.1	3.3	2.0	1.9	3.5	3.1	101.5	99.9	99.4
2014	11	1579	182	15.9	6.0	0.14	0.03	101.3	101.2	4.8	3.6	2.0	4.6	2.7	101.4	102.3	100.3
2015	19	1501	332	12.0	6.6	-0.04	-0.04	100.5	101.5	4.1	3.3	0.4	4.8	0.4	100.7	102.7	102.7
2016	22	1654	371	17.9	9.3	0.03	-0.00	102.0	102.8	4.5	2.0	0.9	5.7	2.2	102.9	98.0	102.0

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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Nova Scotia

Year	Cows	LPI	Milk	Fat	Protein	Fat%	Protein%	Pers	SCS	Conf	DS	F&L	MS	Rump	HL	DF	DCA
2006	1	1515	156	14.0	5.0	0.11	0.02	104.0	101.0	2.0	0.0	5.0	0.0	0.0	104.0	.	.
2007	1	1218	443	-7.0	8.0	-0.43	-0.09	102.0	99.0	4.0	3.0	2.0	2.0	1.0	98.0	.	.
2008	1	1198	191	-6.0	1.0	-0.25	-0.10	102.0	103.0	2.0	0.0	0.0	2.0	4.0	100.0	100.0	101.0
2010	1	1164	-215	-13.0	-7.0	-0.07	-0.04	99.0	105.0	1.0	-1.0	0.0	1.0	2.0	102.0	104.0	.
2011	1	2134	733	33.0	22.0	0.01	0.06	102.0	105.0	10.0	8.0	7.0	8.0	3.0	106.0	.	.
2012	1	1230	93	-5.0	-2.0	-0.15	-0.10	100.0	100.0	3.0	0.0	1.0	4.0	0.0	103.0	.	.
2013	1	1198	-205	4.0	-1.0	0.23	0.10	101.0	102.0	-1.0	-3.0	-3.0	-1.0	-1.0	99.0	101.0	96.0
2014	5	1417	8	10.4	0.4	0.17	0.00	102.4	101.0	2.6	0.2	3.0	2.0	2.2	102.4	100.0	.
2015	1	1041	-43	0.0	-4.0	0.03	-0.08	101.0	99.0	-1.0	-4.0	-1.0	-2.0	1.0	100.0	.	.
2016	1	1329	-248	7.0	0.0	0.31	0.17	102.0	95.0	4.0	0.0	4.0	5.0	5.0	96.0	.	.

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
2007	2	748	-391	-28.5	-11.5	-0.21	-0.03	98.0	98.0	-2.0	-3.0	-1.0	-2.0	-0.5	99.5	101.0	.
2008	3	1089	-36	-7.0	-1.3	-0.08	-0.01	99.3	103.3	-0.3	-1.3	0.7	-1.3	0.0	98.3	98.0	98.0
2010	1	1294	-109	9.0	-3.0	0.24	0.00	98.0	102.0	0.0	-1.0	-1.0	0.0	-1.0	100.0	103.0	.
2011	3	1307	386	7.3	7.3	-0.16	-0.07	103.0	106.3	-1.7	-2.0	-1.3	-2.0	1.0	99.3	100.0	95.0
2013	1	1425	437	26.0	6.0	0.11	-0.12	103.0	101.0	0.0	0.0	-1.0	0.0	3.0	101.0	101.0	.
2014	2	1315	515	9.0	9.0	-0.23	-0.10	102.0	107.0	-1.5	-1.5	-0.5	-2.5	2.5	99.5	99.5	97.0
2015	1	1292	230	5.0	3.0	-0.09	-0.06	102.0	104.0	1.0	0.0	-2.0	1.0	-2.0	101.0	.	.

Notes:

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

Year	Cows	LPI	Milk	Fat	Protein	Fat%	Protein%	Pers	SCS	Conf	DS	F&L	MS	Rump	HL	DF	DCA
2006	3	888	-283	-15.3	-6.3	-0.05	0.03	99.7	99.0	-3.3	-4.7	-3.0	-1.3	-0.3	97.7	103.0	97.0
2007	2	970	192	-5.5	-1.0	-0.24	-0.15	100.0	99.5	-2.5	-0.5	-2.5	-3.0	5.0	96.5	.	.
2008	5	956	-108	-10.2	-2.8	-0.10	-0.00	101.2	100.4	-4.2	-5.0	-3.6	-3.0	-2.8	99.0	99.5	99.0
2009	2	1037	225	-0.5	2.0	-0.18	-0.11	99.5	100.5	-3.5	-1.0	-4.5	-3.0	1.5	96.0	.	.
2010	3	1013	-248	-5.0	-6.3	0.11	0.00	100.3	96.3	0.3	-2.0	-1.3	2.0	-3.3	97.7	100.5	99.0
2011	8	1164	-8	-1.1	-1.9	-0.00	-0.04	99.8	100.1	0.5	-1.1	0.9	0.1	0.8	99.9	101.7	99.2
2012	5	1152	-17	-4.0	-3.8	-0.06	-0.08	98.4	98.4	2.0	-1.0	0.2	3.2	-2.4	101.6	101.5	100.6
2013	5	1138	-252	-1.8	-6.8	0.17	-0.00	99.0	97.8	2.0	-0.4	1.0	2.6	-0.4	99.8	103.0	99.2
2014	4	1162	135	-0.3	0.0	-0.10	-0.09	100.5	102.0	-0.8	-3.0	0.5	-1.3	1.0	101.3	102.0	101.0
2015	4	1150	-79	3.0	-2.8	0.12	-0.02	101.5	98.3	0.5	-1.5	-0.5	1.0	-1.5	99.5	.	.
2016	1	1488	79	12.0	3.0	0.14	0.02	104.0	99.0	5.0	4.0	4.0	3.0	7.0	102.0	104.0	97.0

Notes:

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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
2006	98	964	-166	-17.3	-5.1	-0.17	-0.02	98.9	99.3	-0.4	-1.0	-0.2	-0.2	-0.1	99.5	98.3	98.5
2007	119	1056	-52	-10.2	-1.8	-0.13	-0.01	99.6	99.2	-0.2	-0.7	0.0	-0.3	-0.4	99.1	99.8	99.2
2008	104	1062	-8	-9.2	-1.1	-0.15	-0.02	99.6	99.4	-0.4	-0.8	-0.7	-0.2	-0.4	99.2	99.6	99.1
2009	94	1119	-61	-5.8	-2.0	-0.05	-0.01	99.9	100.2	0.1	-0.6	-0.3	0.3	0.3	99.7	99.5	98.6
2010	119	1129	-19	-3.5	-0.5	-0.04	0.00	100.8	99.6	-0.4	-1.1	0.0	-0.4	0.2	99.4	100.1	100.3
2011	107	1247	59	-0.7	1.1	-0.05	-0.01	100.7	100.1	1.2	0.7	0.8	1.5	0.8	100.2	100.7	99.8
2012	100	1225	-14	-1.3	-0.2	-0.01	0.01	100.5	99.6	1.5	0.5	1.0	1.7	1.8	100.0	99.9	100.5
2013	93	1223	-75	-3.3	-1.4	0.00	0.02	100.2	99.5	1.9	0.5	1.6	1.8	1.5	100.7	100.0	99.7
2014	77	1343	95	3.4	2.0	-0.01	-0.01	101.3	101.1	2.1	0.9	1.0	2.4	1.3	101.2	102.7	101.5
2015	94	1327	16	0.4	0.4	0.00	-0.00	100.9	100.4	3.2	2.2	1.8	3.4	1.2	101.4	101.1	101.8
2016	54	1424	101	5.4	2.8	0.02	0.01	101.6	102.2	3.5	2.3	1.8	3.6	2.1	101.5	101.0	96.2

Notes:

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Manitoba

Year	Cows	LPI	Milk	Fat	Protein	Fat%	Protein%	Pers	SCS	Conf	DS	F&L	MS	Rump	HL	DF	DCA
2006	20	1120	-164	-7.8	-3.2	-0.01	0.03	99.8	100.5	-0.4	-0.9	0.1	-0.1	-1.4	100.4	101.3	98.8
2007	26	1021	-73	-13.2	-4.3	-0.17	-0.06	99.2	100.8	0.6	0.0	-1.0	1.0	-0.3	98.5	99.7	98.5
2008	17	1120	-56	-6.8	-1.6	-0.07	-0.00	100.0	101.2	-0.2	-0.1	-0.6	-0.2	-0.6	99.6	100.2	98.8
2009	24	1263	32	1.6	0.4	0.01	-0.01	99.6	100.5	2.0	1.3	-0.3	2.4	1.2	99.9	99.7	98.7
2010	24	1115	-154	-7.4	-4.8	-0.01	-0.02	97.8	100.3	1.8	0.9	-1.6	2.6	0.9	99.5	100.0	100.7
2011	27	1266	62	1.4	0.5	-0.02	-0.03	99.5	100.7	2.7	2.5	-0.9	3.4	1.6	99.0	100.8	101.3
2012	37	1351	8	6.0	1.4	0.10	0.03	100.9	100.5	2.6	1.9	-0.5	3.1	1.9	100.4	102.1	99.3
2013	24	1299	104	2.5	2.7	-0.03	0.00	101.1	100.0	1.6	0.3	-0.3	2.5	1.7	100.2	101.0	102.0
2014	22	1236	9	-0.9	0.5	-0.02	0.01	101.0	100.7	1.5	0.7	-0.3	1.8	0.2	99.5	.	101.0
2015	30	1436	6	5.5	1.0	0.09	0.02	101.2	100.5	5.1	3.9	2.4	5.0	2.4	101.1	101.0	101.2
2016	16	1311	26	4.4	2.1	0.06	0.04	101.9	100.8	1.5	0.5	0.3	1.9	0.2	100.1	.	99.0

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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Alberta

Year	Cows	LPI	Milk	Fat	Protein	Fat%	Protein%	Pers	SCS	Conf	DS	F&L	MS	Rump	HL	DF	DCA
2006	5	986	163	-11.4	2.4	-0.30	-0.04	97.2	102.0	-3.0	-1.6	-4.6	-2.2	-0.2	98.2	.	.
2007	2	1029	222	-14.0	1.0	-0.40	-0.13	99.5	100.5	-2.0	-5.0	-0.5	-1.5	-1.0	103.0	.	.
2008	7	1022	83	-12.0	-0.6	-0.27	-0.07	98.0	98.3	0.0	-0.6	-0.4	-0.1	0.4	99.9	103.0	.
2009	7	1162	-111	-8.1	-0.6	-0.05	0.06	99.6	99.4	1.0	0.9	0.3	1.0	2.6	100.4	106.0	.
2010	5	1121	19	-6.0	0.0	-0.11	-0.01	98.0	99.0	0.8	0.4	-0.6	1.2	2.0	99.0	99.0	.
2011	1	1398	309	19.0	3.0	0.09	-0.13	101.0	108.0	-1.0	1.0	-1.0	-3.0	5.0	102.0	104.0	.
2012	1	1311	470	5.0	7.0	-0.27	-0.13	100.0	105.0	2.0	3.0	0.0	1.0	1.0	101.0	.	.
2014	2	1303	83	1.5	0.5	-0.04	-0.06	101.0	102.0	1.5	0.0	2.5	1.0	-0.5	102.0	.	.

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.