

**Provincial genetic trends by birth year for Milking Shorthorn cows
Lactanet Canada, August 2023**

Prince Edward Island

Year	Cows	LPI	Milk	Fat	Protein	Fat%	Protein%	Pers	SCS	Conf	DS	F&L	MS	Rump	HL	DF	DCA
2010	14	1145	13	-3.1	-2.8	-0.05	-0.07	99.1	101.1	-0.9	-2.3	-1.4	-0.2	0.3	99.2	100.9	98.9
2011	21	1447	8	9.9	-0.3	0.16	-0.01	101.1	99.1	3.1	1.0	2.8	3.4	2.9	100.8	101.2	96.3
2012	12	1223	58	-1.8	-0.5	-0.06	-0.04	98.9	101.6	-0.3	-1.8	-0.5	0.2	-0.3	100.1	100.2	96.0
2013	21	1516	56	12.7	3.0	0.17	0.04	101.8	100.3	3.2	1.5	1.4	3.2	3.4	101.3	100.5	97.8
2014	12	1581	145	9.2	4.8	0.05	0.02	101.7	101.6	4.8	3.3	2.1	4.6	2.5	102.2	100.4	99.7
2015	23	1465	229	5.3	4.1	-0.07	-0.05	100.1	100.6	3.6	2.4	0.3	4.6	-0.6	100.9	102.0	100.4
2016	24	1555	167	7.8	3.7	0.01	-0.02	101.6	102.9	4.2	1.5	0.6	5.5	1.5	102.4	100.3	98.8
2017	18	1545	39	6.6	2.7	0.09	0.04	101.9	101.2	4.6	3.1	2.0	5.1	1.8	102.7	100.8	.
2018	25	1662	171	9.6	6.0	0.04	0.03	102.6	101.9	6.0	4.0	3.2	6.1	3.6	103.1	100.6	103.0
2019	30	1509	18	6.7	1.4	0.10	0.03	101.6	100.6	4.3	2.1	2.6	4.7	3.0	102.0	99.0	.
2020	18	1669	185	9.8	6.7	0.03	0.04	102.1	101.9	5.8	4.3	4.1	5.4	3.1	103.0	.	.

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
2010	1	1132	-250	-17.0	-9.0	-0.10	-0.05	99.0	105.0	0.0	-2.0	-1.0	1.0	2.0	101.0	103.0	.
2011	1	2032	537	25.0	17.0	0.03	0.06	101.0	103.0	10.0	8.0	7.0	8.0	3.0	104.0	98.0	.
2012	2	1138	71	-5.0	-5.0	-0.14	-0.16	100.5	102.0	-0.5	-3.0	-2.0	0.0	-1.0	101.0	104.5	102.5
2013	2	1285	152	-1.0	-1.5	-0.12	-0.12	100.0	101.0	1.0	-1.0	-2.5	2.5	-1.5	102.5	103.5	100.0
2014	5	1392	-55	6.6	-1.8	0.15	-0.01	102.6	99.8	2.0	-0.8	2.4	2.0	2.0	102.0	102.0	99.0
2015	1	900	-192	-12.0	-7.0	-0.07	-0.04	102.0	97.0	-2.0	-4.0	-2.0	-2.0	1.0	99.0	.	.
2016	1	1231	-421	-1.0	-4.0	0.30	0.17	102.0	95.0	3.0	0.0	3.0	4.0	5.0	98.0	96.0	.
2017	4	1412	-3	12.8	2.3	0.21	0.06	103.8	103.8	-0.5	-2.8	-1.5	-0.5	-0.5	100.8	.	.
2019	2	956	-130	-11.0	-7.5	-0.09	-0.09	101.5	98.5	-1.0	-1.0	-1.5	-1.5	2.5	98.0	.	.
2020	1	1390	-113	7.0	4.0	0.20	0.17	105.0	99.0	-1.0	-1.0	-2.0	1.0	5.0	101.0	.	.

Notes:

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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
2010	1	1278	-126	5.0	-4.0	0.17	-0.02	99.0	102.0	-1.0	-1.0	-2.0	0.0	-1.0	99.0	103.0	.
2011	3	1347	373	6.0	6.3	-0.17	-0.08	102.3	107.0	-2.3	-2.7	-2.0	-2.3	0.0	99.7	102.0	96.0
2013	1	1463	339	23.0	4.0	0.13	-0.11	103.0	100.0	0.0	-3.0	-2.0	1.0	4.0	102.0	102.0	98.0
2014	2	1320	450	5.0	7.0	-0.23	-0.11	101.5	107.5	-2.0	-2.5	-1.5	-3.0	1.0	100.0	102.5	98.5
2015	1	1300	195	1.0	2.0	-0.12	-0.07	102.0	104.0	0.0	-2.0	-2.0	0.0	-2.0	103.0	.	.
2018	3	1512	78	11.3	-0.3	0.13	-0.05	101.0	100.7	3.0	-1.7	0.7	3.0	3.7	106.3	105.0	105.0
2019	1	1450	265	8.0	2.0	-0.06	-0.11	99.0	100.0	1.0	-4.0	-2.0	3.0	2.0	106.0	107.0	.

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Quebec

Year	Cows	LPI	Milk	Fat	Protein	Fat%	Protein%	Pers	SCS	Conf	DS	F&L	MS	Rump	HL	DF	DCA
2010	3	1044	-268	-5.0	-7.7	0.12	-0.01	100.3	97.0	0.0	-2.7	-1.3	2.0	-4.0	98.0	101.0	98.0
2011	8	1176	-57	-3.6	-3.6	-0.01	-0.04	99.4	100.5	0.0	-1.6	0.4	0.1	0.6	100.1	102.5	98.8
2012	5	1161	-81	-6.8	-6.2	-0.05	-0.09	97.4	98.6	1.4	-2.0	-0.4	2.8	-2.4	102.6	104.2	102.0
2013	5	1172	-260	-3.6	-7.6	0.14	-0.02	98.6	98.6	1.8	-1.6	0.8	3.0	-0.8	100.2	103.3	98.6
2014	4	1137	101	-2.8	-1.8	-0.12	-0.10	100.0	102.0	-1.5	-4.0	-0.8	-2.0	0.5	101.8	103.0	102.0
2015	4	1180	-93	2.3	-3.5	0.11	-0.03	101.3	99.0	-0.3	-2.8	-1.3	0.5	-1.3	100.3	104.0	.
2016	3	1464	130	2.0	1.3	-0.06	-0.05	101.3	102.0	4.0	0.7	3.3	3.7	2.0	104.3	104.0	97.0
2017	3	1350	6	1.7	-0.7	0.03	-0.02	101.3	98.7	4.0	0.7	2.7	4.0	3.0	101.7	99.0	.
2018	6	1282	-17	-0.5	-0.8	0.01	-0.01	102.2	100.3	1.7	1.0	-0.2	1.5	1.5	100.2	107.0	106.0
2019	2	1101	64	5.5	0.5	0.05	-0.02	101.5	97.0	-1.0	3.5	-1.5	-3.5	1.0	96.0	.	.

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
2010	121	1140	-30	-5.0	-1.4	-0.06	-0.01	100.9	99.7	-1.0	-1.8	-0.5	-0.7	-0.4	99.3	100.5	100.1
2011	107	1256	40	-2.7	0.2	-0.07	-0.02	100.8	100.1	0.7	0.0	0.4	1.1	0.1	100.0	100.8	99.7
2012	101	1221	-57	-4.5	-1.9	-0.03	-0.00	100.6	99.7	1.0	-0.2	0.4	1.5	1.6	100.2	100.3	100.5
2013	95	1216	-114	-6.2	-3.0	-0.02	0.00	100.3	99.3	1.3	-0.3	1.2	1.5	1.3	100.8	100.4	99.6
2014	79	1347	75	0.7	0.7	-0.04	-0.03	101.7	101.0	1.6	0.2	0.5	2.1	1.1	101.5	102.4	101.2
2015	96	1305	-44	-4.9	-1.6	-0.04	-0.01	100.7	100.6	2.4	1.1	1.3	2.8	1.1	101.9	102.5	101.3
2016	81	1412	26	3.2	1.4	0.04	0.02	102.2	101.6	2.6	1.2	1.3	2.6	1.3	101.3	100.2	98.3
2017	91	1379	2	-0.4	-0.1	-0.00	-0.00	101.8	100.7	3.2	2.1	2.2	3.0	2.1	101.7	101.2	100.0
2018	72	1403	35	-0.2	0.8	-0.02	0.00	102.2	100.0	3.9	2.3	2.4	3.7	2.9	101.6	100.7	98.4
2019	58	1432	81	4.7	1.7	0.02	-0.01	101.9	100.3	3.3	1.7	2.0	3.2	2.8	101.5	101.1	.
2020	50	1448	49	2.0	2.0	0.00	0.02	101.5	100.7	4.1	4.0	2.3	3.8	2.7	101.2	100.7	.

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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Manitoba

Year	Cows	LPI	Milk	Fat	Protein	Fat%	Protein%	Pers	SCS	Conf	DS	F&L	MS	Rump	HL	DF	DCA
2010	24	1140	-163	-8.7	-5.5	-0.03	-0.03	97.9	100.2	1.2	0.1	-1.7	2.3	0.2	99.8	101.8	100.6
2011	27	1294	50	0.4	-0.2	-0.02	-0.04	99.6	100.5	2.4	1.8	-0.9	3.0	0.6	99.3	100.8	101.0
2012	37	1380	-9	4.6	0.6	0.09	0.02	100.9	100.4	2.2	1.0	-0.5	2.7	1.1	100.6	102.9	101.8
2013	24	1345	110	2.3	2.5	-0.04	-0.01	101.5	99.7	1.5	-0.4	-0.5	2.6	1.2	100.2	101.5	95.5
2014	22	1283	10	-1.5	0.0	-0.03	-0.00	101.4	100.8	1.3	0.5	-0.2	1.6	-0.7	99.7	103.0	99.0
2015	32	1444	-12	2.8	-0.1	0.06	0.01	101.2	99.9	4.8	2.8	2.3	4.8	2.3	101.3	99.9	99.1
2016	19	1320	7	3.4	1.4	0.05	0.03	102.6	99.2	1.2	0.1	-0.3	1.7	-0.6	99.8	100.3	99.3
2017	12	1100	-78	-10.0	-3.0	-0.10	-0.02	100.0	97.5	0.9	1.4	0.1	0.3	0.6	98.3	.	.
2018	11	1186	10	1.3	0.9	0.01	0.02	100.5	98.1	-0.5	1.5	-1.3	-0.7	0.0	96.7	.	.
2019	9	1382	229	5.0	4.7	-0.08	-0.03	100.3	98.4	1.7	1.7	-0.1	2.8	-2.1	99.2	.	.
2020	7	1191	-134	-12.1	-6.0	-0.10	-0.05	98.0	99.6	3.0	1.9	1.9	3.0	-0.7	101.7	.	.

Notes:

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

Year	Cows	LPI	Milk	Fat	Protein	Fat%	Protein%	Pers	SCS	Conf	DS	F&L	MS	Rump	HL	DF	DCA
2010	5	1109	-15	-9.0	-1.8	-0.13	-0.03	98.4	98.6	0.4	0.0	-0.6	1.2	1.0	98.6	99.0	.
2011	1	1366	296	16.0	2.0	0.05	-0.14	102.0	108.0	-2.0	0.0	-2.0	-3.0	4.0	100.0	103.0	.
2012	1	1341	462	3.0	6.0	-0.28	-0.14	99.0	105.0	1.0	2.0	0.0	0.0	1.0	104.0	.	.
2014	2	1334	75	0.0	-1.0	-0.06	-0.07	100.5	100.0	2.5	-0.5	2.0	2.0	0.0	102.5	106.0	.
2017	1	1406	215	9.0	6.0	-0.01	0.00	101.0	99.0	3.0	2.0	2.0	2.0	-3.0	94.0	.	.
2019	1	1628	62	27.0	3.0	0.40	0.03	103.0	99.0	4.0	4.0	2.0	3.0	3.0	101.0	.	.

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.