

Provincial genetic trends by birth year for Holstein cows
Lactanet Canada, August 2020

Prince Edward Island

Year	Cows	LPI	Milk	Fat	Protein	Fat%	Protein%	Pers	SCS	Conf	DS	F&L	MS	Rump	HL	DF	DCA
2007	2244	1765	-555	-26.3	-22.0	-0.04	-0.03	98.0	98.0	-3.9	-0.7	-3.0	-4.8	0.1	97.5	99.9	98.1
2008	2284	1824	-450	-24.1	-18.6	-0.06	-0.03	97.9	98.1	-3.1	-0.2	-2.3	-4.1	0.5	97.9	99.8	98.5
2009	2367	1865	-381	-20.0	-16.4	-0.05	-0.03	98.2	98.3	-2.8	-0.3	-2.3	-3.6	0.6	98.1	99.8	98.3
2010	2414	1922	-327	-15.5	-13.6	-0.02	-0.02	98.8	98.7	-2.1	0.3	-1.6	-3.0	0.7	98.3	99.5	98.2
2011	2179	2016	-225	-10.0	-10.3	-0.01	-0.02	98.4	98.8	-0.8	1.0	-0.5	-1.9	1.4	98.8	99.1	99.0
2012	2332	2067	-202	-7.0	-7.7	0.01	-0.01	98.4	98.8	-0.1	1.2	-0.1	-1.0	1.4	99.1	99.0	99.4
2013	2302	2151	-24	-3.0	-2.0	-0.01	-0.01	98.7	99.2	0.7	1.5	0.4	-0.2	1.4	99.5	99.2	99.6
2014	2304	2261	89	4.9	3.1	0.02	0.00	99.1	100.0	1.4	1.4	1.3	0.5	1.7	100.3	99.7	99.9
2015	2330	2344	170	9.7	7.7	0.03	0.02	99.5	100.7	2.3	1.9	1.8	1.4	1.8	100.9	99.7	100.5
2016	2260	2457	337	17.5	14.1	0.05	0.03	99.6	101.0	3.1	2.2	2.6	2.3	1.8	101.6	100.1	101.2
2017	1528	2574	446	26.4	20.5	0.09	0.05	100.0	101.7	4.0	2.7	3.2	3.2	2.0	102.3	100.4	101.8

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
2007	2888	1765	-466	-24.9	-19.1	-0.06	-0.03	97.6	97.7	-4.8	-1.6	-3.3	-5.2	-0.8	97.5	100.3	98.3
2008	3203	1836	-384	-20.5	-15.7	-0.05	-0.02	97.9	98.4	-3.9	-0.9	-2.7	-4.7	-0.1	98.0	100.3	98.7
2009	3045	1875	-336	-18.0	-14.5	-0.04	-0.03	97.4	98.3	-3.3	-0.6	-2.5	-4.0	0.2	98.2	100.2	98.6
2010	3168	1940	-220	-13.0	-10.6	-0.04	-0.03	98.2	98.7	-2.7	-0.2	-2.1	-3.5	0.6	98.4	100.2	98.8
2011	2952	2020	-179	-8.6	-8.1	-0.01	-0.02	98.3	98.9	-1.6	0.3	-1.1	-2.4	0.8	99.1	99.8	99.7
2012	2837	2126	-115	-2.7	-3.5	0.02	0.00	98.2	99.1	-0.3	1.0	-0.0	-1.1	1.2	99.6	100.0	100.0
2013	2852	2217	68	3.0	2.0	0.01	0.00	98.4	99.6	0.6	1.0	0.8	-0.3	1.5	100.0	100.0	100.3
2014	2937	2284	171	6.9	5.9	0.01	0.00	99.3	100.2	1.0	1.1	1.1	0.3	1.2	100.6	100.3	100.5
2015	3025	2384	246	13.7	10.7	0.04	0.02	99.3	100.8	2.0	1.7	1.9	1.3	1.6	101.3	100.3	101.0
2016	2696	2490	366	20.7	16.0	0.06	0.03	99.5	101.2	2.8	1.9	2.6	2.0	1.9	102.0	101.0	101.8
2017	2032	2595	478	27.6	21.2	0.09	0.04	100.0	101.9	4.0	2.3	3.2	3.2	2.4	102.6	101.1	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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New Brunswick

Year	Cows	LPI	Milk	Fat	Protein	Fat%	Protein%	Pers	SCS	Conf	DS	F&L	MS	Rump	HL	DF	DCA
2007	2373	1759	-460	-24.2	-19.3	-0.06	-0.03	97.9	98.1	-4.9	-1.5	-3.5	-5.4	-0.8	97.6	100.1	98.7
2008	2478	1812	-372	-21.6	-16.9	-0.06	-0.04	98.1	98.5	-4.1	-0.9	-2.8	-4.9	-0.2	98.0	100.1	98.9
2009	2442	1841	-294	-19.7	-14.7	-0.07	-0.04	98.0	98.4	-3.9	-1.2	-2.8	-4.5	-0.1	98.2	100.2	98.7
2010	2393	1906	-236	-14.1	-10.6	-0.04	-0.02	98.3	98.7	-3.1	-0.3	-2.2	-3.9	0.2	98.0	99.7	98.5
2011	2199	1998	-159	-8.7	-8.1	-0.02	-0.02	98.1	98.6	-1.7	0.4	-1.0	-2.7	0.9	98.7	99.5	99.4
2012	2139	2075	-145	-3.7	-5.3	0.02	-0.00	98.4	98.8	-0.6	0.9	-0.2	-1.5	1.0	99.0	99.1	99.6
2013	2072	2175	30	0.7	0.6	0.00	-0.00	98.5	99.4	0.3	1.2	0.5	-0.5	1.1	99.6	99.6	100.1
2014	1935	2270	91	7.2	4.3	0.04	0.01	98.9	100.0	1.0	0.9	1.3	0.2	1.4	100.4	99.9	100.5
2015	1977	2356	217	12.0	9.5	0.04	0.02	99.3	100.6	2.0	1.7	1.8	1.3	1.6	100.9	99.8	100.5
2016	2004	2455	329	19.2	13.8	0.06	0.02	99.4	100.9	2.8	1.9	2.3	2.0	1.9	101.7	100.4	101.3
2017	1381	2548	405	25.2	17.8	0.09	0.04	99.9	101.6	3.7	2.4	2.9	2.8	2.1	102.3	100.7	101.7

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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Quebec

Year	Cows	LPI	Milk	Fat	Protein	Fat%	Protein%	Pers	SCS	Conf	DS	F&L	MS	Rump	HL	DF	DCA
2007	64671	1774	-427	-23.0	-17.3	-0.06	-0.02	98.2	98.0	-5.0	-1.8	-3.3	-5.4	-0.9	97.5	100.2	98.4
2008	67849	1831	-360	-20.2	-14.7	-0.05	-0.02	98.1	98.4	-4.2	-1.4	-2.8	-4.8	-0.3	97.9	100.2	98.7
2009	69280	1866	-268	-17.2	-12.5	-0.06	-0.03	97.8	98.4	-3.8	-1.2	-2.7	-4.3	-0.2	98.1	100.0	98.4
2010	67837	1940	-165	-11.7	-8.1	-0.04	-0.02	98.4	98.5	-3.0	-0.6	-2.0	-3.7	0.2	98.2	100.0	98.6
2011	66823	2022	-125	-7.8	-5.7	-0.02	-0.01	98.4	98.8	-1.9	-0.3	-1.2	-2.5	0.5	99.1	99.8	99.5
2012	67320	2115	-73	-2.0	-2.2	0.01	0.00	98.7	99.1	-0.8	0.3	-0.3	-1.5	0.8	99.5	99.9	99.9
2013	62600	2211	77	2.8	3.1	0.00	0.01	98.6	99.8	0.2	0.5	0.4	-0.5	1.1	100.2	100.1	100.0
2014	60338	2303	156	7.9	7.2	0.02	0.02	99.3	100.6	1.0	0.7	1.2	0.3	1.4	101.0	100.5	100.4
2015	58270	2390	264	13.0	11.1	0.03	0.02	99.4	101.0	2.1	1.4	2.0	1.3	1.6	101.6	100.4	100.9
2016	53675	2482	397	19.1	15.9	0.04	0.02	99.6	101.5	2.7	1.8	2.5	2.0	1.6	102.1	101.0	101.6
2017	43563	2567	529	22.9	20.2	0.03	0.02	100.0	102.0	3.9	2.3	3.3	3.1	2.3	102.7	100.9	101.8

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
2007	53716	1751	-520	-24.2	-20.6	-0.04	-0.02	98.0	98.0	-5.0	-1.7	-3.4	-5.5	-0.9	97.5	100.1	98.4
2008	55261	1805	-457	-21.9	-18.0	-0.04	-0.02	98.0	98.3	-4.2	-1.1	-2.8	-4.8	-0.2	97.9	100.0	98.7
2009	55736	1841	-363	-19.2	-15.9	-0.04	-0.03	97.9	98.3	-3.8	-1.0	-2.7	-4.4	-0.2	98.1	100.0	98.5
2010	56052	1902	-277	-14.2	-11.8	-0.03	-0.02	98.3	98.5	-3.1	-0.4	-2.1	-3.8	0.3	98.1	99.7	98.5
2011	55067	1986	-216	-8.9	-9.0	-0.00	-0.01	98.2	98.7	-2.0	0.1	-1.3	-2.8	0.8	98.7	99.5	99.4
2012	54228	2077	-146	-3.8	-5.3	0.02	-0.00	98.4	98.7	-0.8	0.6	-0.5	-1.6	1.0	99.1	99.5	99.8
2013	52531	2157	1	0.8	-0.2	0.01	-0.00	98.4	99.1	-0.0	0.8	0.2	-0.8	1.0	99.5	99.5	100.1
2014	51370	2252	91	6.1	3.8	0.03	0.01	98.8	99.9	0.8	0.9	1.0	0.1	1.3	100.3	99.8	100.2
2015	52145	2341	185	11.0	8.2	0.04	0.02	99.0	100.5	1.8	1.5	1.6	1.0	1.5	101.0	99.9	100.7
2016	48397	2433	329	17.2	13.1	0.05	0.02	99.3	100.9	2.5	1.8	2.2	1.8	1.6	101.5	100.3	101.3
2017	40055	2531	438	22.5	18.1	0.06	0.03	99.7	101.6	3.5	2.3	2.9	2.8	2.1	102.2	100.6	101.8

Notes:

1. Based on all cows with both production and type indexes.
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
2007	5503	1710	-478	-27.1	-20.5	-0.08	-0.04	98.0	97.7	-5.8	-2.7	-3.7	-6.0	-1.5	97.5	100.4	98.2
2008	6138	1765	-420	-24.7	-18.3	-0.07	-0.03	97.9	98.0	-4.9	-2.0	-3.1	-5.3	-0.9	97.8	100.3	98.8
2009	6030	1808	-356	-21.5	-17.0	-0.07	-0.04	97.8	98.1	-4.6	-2.1	-3.0	-4.9	-0.9	98.1	100.4	98.7
2010	5977	1883	-254	-17.3	-12.9	-0.06	-0.03	98.3	98.3	-3.7	-1.6	-2.5	-4.0	-0.4	98.4	100.6	98.9
2011	5903	1962	-165	-12.0	-9.1	-0.05	-0.03	98.1	98.5	-2.9	-1.1	-1.8	-3.3	0.1	99.0	100.4	99.7
2012	6159	2047	-96	-7.3	-5.3	-0.03	-0.02	98.4	98.7	-1.9	-0.8	-1.1	-2.3	0.4	99.4	100.5	100.1
2013	5426	2144	82	-2.2	0.8	-0.04	-0.01	98.5	99.3	-1.0	-0.6	-0.4	-1.4	0.5	100.1	100.7	100.4
2014	5412	2220	156	2.2	4.3	-0.03	-0.01	99.0	99.7	-0.3	-0.4	0.2	-0.6	0.6	100.6	100.8	100.7
2015	5474	2313	244	7.7	8.4	-0.01	0.00	99.2	100.4	0.6	0.0	0.8	0.3	0.6	101.3	101.1	101.3
2016	4873	2405	358	14.1	13.4	0.01	0.01	99.7	100.6	1.5	0.4	1.4	1.2	1.0	101.8	101.3	101.7
2017	3862	2524	499	22.2	19.3	0.03	0.02	100.1	101.4	2.6	0.9	2.0	2.4	1.2	102.5	101.7	102.3

Notes:

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Saskatchewan

Year	Cows	LPI	Milk	Fat	Protein	Fat%	Protein%	Pers	SCS	Conf	DS	F&L	MS	Rump	HL	DF	DCA
2007	3540	1720	-557	-30.1	-23.1	-0.08	-0.04	97.7	97.7	-5.2	-2.2	-3.5	-5.6	-1.2	97.7	100.8	98.6
2008	4052	1756	-513	-28.9	-21.3	-0.08	-0.03	97.6	97.8	-4.4	-1.5	-3.1	-4.9	-0.7	97.8	100.5	98.6
2009	3926	1799	-444	-25.6	-19.5	-0.07	-0.04	97.6	98.0	-4.1	-1.4	-2.9	-4.6	-0.6	98.1	100.7	98.7
2010	3940	1858	-339	-21.3	-15.6	-0.07	-0.03	97.8	97.9	-3.4	-1.2	-2.4	-3.9	-0.2	98.2	100.5	98.7
2011	3663	1938	-243	-16.5	-11.5	-0.06	-0.03	97.9	98.2	-2.4	-0.6	-1.5	-3.1	0.2	98.7	100.2	99.3
2012	3898	2020	-176	-10.9	-8.1	-0.03	-0.02	98.0	98.4	-1.4	-0.1	-0.9	-2.0	0.7	99.1	100.1	99.8
2013	3548	2102	-99	-7.3	-4.7	-0.03	-0.01	98.1	99.0	-0.5	0.1	-0.1	-1.1	0.7	99.7	100.3	100.1
2014	3106	2210	68	-0.7	0.8	-0.02	-0.01	98.4	99.6	0.4	0.5	0.7	-0.2	1.1	100.4	100.6	100.6
2015	3293	2290	139	4.8	5.3	0.00	0.01	99.0	100.2	1.2	0.7	1.2	0.6	1.0	101.0	100.5	100.9
2016	3425	2395	243	11.8	11.0	0.03	0.03	99.3	100.9	1.9	0.9	1.8	1.5	0.9	101.7	100.9	101.6
2017	2745	2460	320	15.5	14.0	0.04	0.03	99.9	101.4	2.7	1.3	2.2	2.3	1.2	102.2	101.0	101.7

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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Alberta

Year	Cows	LPI	Milk	Fat	Protein	Fat%	Protein%	Pers	SCS	Conf	DS	F&L	MS	Rump	HL	DF	DCA
2007	12743	1719	-455	-28.1	-20.0	-0.09	-0.04	97.9	97.8	-5.7	-2.9	-3.7	-5.7	-1.8	97.7	100.6	98.5
2008	13430	1773	-399	-25.3	-18.0	-0.09	-0.04	97.7	98.0	-4.8	-2.2	-3.1	-5.0	-1.1	98.0	100.6	98.7
2009	13710	1814	-336	-22.8	-16.0	-0.09	-0.04	97.6	98.1	-4.4	-2.0	-2.9	-4.6	-0.9	98.2	100.6	98.8
2010	13540	1880	-269	-18.7	-12.9	-0.07	-0.03	97.8	98.2	-3.5	-1.6	-2.4	-3.8	-0.5	98.5	100.5	98.8
2011	12995	1963	-165	-12.6	-8.7	-0.05	-0.02	97.9	98.3	-2.7	-1.0	-1.8	-3.1	-0.0	98.9	100.3	99.5
2012	13183	2043	-106	-7.9	-5.7	-0.03	-0.02	98.0	98.6	-1.7	-0.6	-1.0	-2.1	0.3	99.4	100.2	100.0
2013	12158	2119	5	-4.2	-1.7	-0.03	-0.01	98.4	99.0	-0.9	-0.5	-0.4	-1.3	0.4	99.9	100.4	100.1
2014	11762	2212	107	1.3	2.8	-0.02	-0.00	98.6	99.7	0.0	-0.0	0.4	-0.4	0.7	100.5	100.5	100.4
2015	11972	2285	176	4.9	6.1	-0.01	0.00	98.9	100.2	0.8	0.1	0.9	0.4	0.8	101.1	100.7	100.8
2016	10691	2384	299	11.7	11.3	0.01	0.01	99.3	100.6	1.6	0.6	1.5	1.3	1.0	101.7	101.0	101.5
2017	8767	2475	358	17.4	16.0	0.04	0.04	99.7	101.4	2.5	1.0	2.1	2.2	1.1	102.3	101.2	101.8

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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British Columbia

Year	Cows	LPI	Milk	Fat	Protein	Fat%	Protein%	Pers	SCS	Conf	DS	F&L	MS	Rump	HL	DF	DCA
2007	10945	1738	-457	-27.1	-20.0	-0.08	-0.04	98.1	97.9	-5.2	-2.3	-3.6	-5.4	-1.2	97.7	100.4	98.7
2008	11166	1782	-377	-25.4	-17.6	-0.10	-0.04	98.0	98.0	-4.4	-1.7	-3.1	-4.7	-0.7	97.7	100.1	98.6
2009	11701	1824	-306	-22.5	-15.7	-0.09	-0.04	97.8	97.9	-4.0	-1.6	-2.9	-4.3	-0.6	98.0	100.2	98.6
2010	11240	1886	-232	-18.0	-12.2	-0.08	-0.03	98.1	98.0	-3.3	-1.3	-2.4	-3.6	-0.1	98.1	100.1	98.6
2011	11417	1980	-138	-12.3	-8.2	-0.06	-0.03	98.2	98.4	-2.1	-0.4	-1.5	-2.7	0.4	98.8	99.9	99.6
2012	11817	2059	-112	-7.6	-5.8	-0.02	-0.01	98.3	98.7	-1.1	-0.1	-0.6	-1.6	0.6	99.3	99.9	100.0
2013	11905	2144	29	-2.5	-0.9	-0.03	-0.01	98.5	99.4	-0.4	0.1	0.0	-0.9	0.7	99.9	100.0	100.1
2014	11593	2242	157	2.7	4.5	-0.02	-0.00	98.9	100.1	0.4	0.2	0.8	-0.0	1.0	100.6	100.4	100.5
2015	11484	2336	246	8.2	8.7	-0.00	0.01	99.3	100.6	1.4	0.8	1.4	0.9	1.2	101.3	100.6	101.0
2016	10221	2442	379	16.3	14.4	0.02	0.02	99.5	101.0	2.3	1.2	2.0	1.8	1.5	101.9	100.9	101.6
2017	7877	2529	481	20.7	18.4	0.03	0.02	99.9	101.5	3.3	1.6	2.7	2.7	1.9	102.5	101.1	102.1

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.

Provincial genetic trends by birth year for Holstein cows
Lactanet Canada, August 2020

Newfoundland

Year	Cows	LPI	Milk	Fat	Protein	Fat%	Protein%	Pers	SCS	Conf	DS	F&L	MS	Rump	HL	DF	DCA
2007	160	1630	-639	-32.7	-26.7	-0.07	-0.04	97.8	97.7	-6.3	-3.3	-4.0	-6.6	-1.6	97.7	100.3	98.4
2008	178	1708	-556	-29.8	-22.5	-0.07	-0.03	97.3	98.2	-5.5	-2.8	-3.5	-5.9	-0.7	98.0	100.8	98.4
2009	198	1777	-309	-23.9	-16.4	-0.10	-0.05	97.6	98.1	-4.9	-2.5	-2.8	-5.2	-0.6	98.1	100.5	98.3
2010	254	1820	-301	-20.8	-17.5	-0.08	-0.06	98.5	98.2	-3.6	-1.6	-2.8	-3.9	-0.3	98.1	100.0	98.3
2011	235	1925	-203	-15.3	-10.9	-0.06	-0.03	98.2	98.9	-3.2	-1.6	-2.0	-3.5	-0.2	99.2	100.5	99.7
2012	305	2044	-45	-7.5	-4.6	-0.05	-0.02	98.3	98.6	-1.5	-0.2	-0.6	-2.0	0.5	99.2	99.8	99.9
2013	299	2122	-13	-3.0	-1.8	-0.02	-0.01	98.5	99.2	-1.1	-0.8	-0.4	-1.2	-0.0	99.9	100.5	100.0
2014	357	2263	132	4.5	5.8	0.00	0.01	99.2	100.3	0.3	-0.0	0.4	-0.1	0.6	100.9	101.2	100.6
2015	357	2366	431	13.3	13.8	-0.02	-0.00	99.3	101.2	0.8	0.4	1.1	0.6	-0.1	101.5	100.9	101.2
2016	356	2496	621	24.5	22.3	0.01	0.02	100.6	101.6	1.5	0.3	1.7	1.3	0.3	102.2	101.4	102.1
2017	263	2613	784	32.4	29.6	0.03	0.03	99.9	101.8	2.6	1.1	2.1	2.6	0.6	102.6	101.4	102.3

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.