



Farm Characteristics	CA-QC-5
Farm Description	A cow-calf operation with 60 beef cows that purchases all replacement heifers and produces predominantly homegrown feed.
Winter Feeding Ration (lbs/cow/day as fed)	45 days supplemented hay (19 lb) on pasture, followed by 182 days on hay (39 lb) and corn grain (0.5 lb)
Retained Ownership/Replacement Ration (lb/head/day as fed)	N/A

Disclaimer: This benchmark is based on 6 farms of data; outliers were excluded as required. Canfax Research Services (CRS) tries to provide quality information, but we make no claims, promises, or guarantees about the accuracy, completeness, or adequacy of the information. CRS does not guarantee and accepts no legal liability arising from or connected to, the accuracy, reliability, or completeness of any material contained in our publications. Reproduction and/or electronic transmission of this publication, in whole or in part, is strictly forbidden without written consent from CRS.

Environment	
Average Annual Temperature	5°C
Average Annual Precipitation (mm)	800-1000
	10. St. Lawrence
Ecoregion	Lowland
Stocking Rate (Animal Unit days per acre)	0.53 cows/acre
Fertilize Hay (yes/no)	Yes
Fertilize Pasture (yes/no)	No
Typical Hay Yield (tonnes/acre)	1.7
Grassland Acres (owned+rented)	111
Crop Acres (includes hay) (owned+rented)	175
Bush and other acres	237

Physical Performance Indicators	
Breed	Mixed
Cow:Bull Ratio	20:1
Bull Culling Rate (%)	8%
Mature Cow Weight (lb)	1,300
Heifer Retention for a steady herd (%)	12%
Cow Death Loss (%)	1.7%
Cow Culling Rate (%)	10.0%
Calves alive after 24hr/100 Cows exposed	93
Calf Death Loss (%) 24 hr to weaning	4%
Calves weaned per 100 cows exposed	90
Total Liveweight Sold per Cow (lb)	650
Weaning Weight (lb)	541
205 day adjusted Weaning Weight (lb)	530
Average Daily Gain pre-weaning (lb)	2.17
Weaning Weight as % of Cow Weight	42%

Production System	
Herd size	60
Days on field feeding (e.g. swath grazing)	0
Days supplemented on pasture	45
Days on full winter feed	182
Calving Start date	March 15
Weaning date	October 11
Sale date	October 11
Retained ownership	N/A
% of feed purchased	2.6%
% of land in crops	33%
Annual sales Retained Cattle (head)	N/A
Placement weight (lbs)	N/A
Sale Weight (lbs)	N/A
Days on feed	0
Days on grass	0

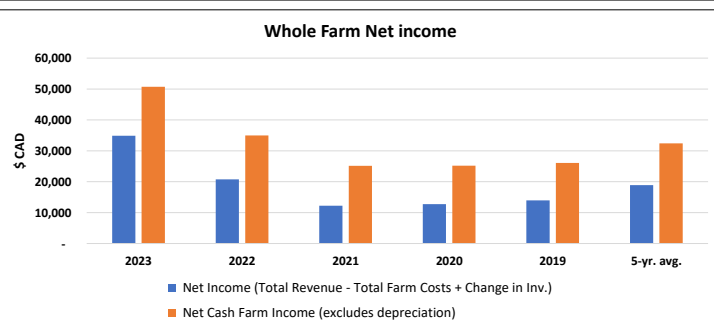
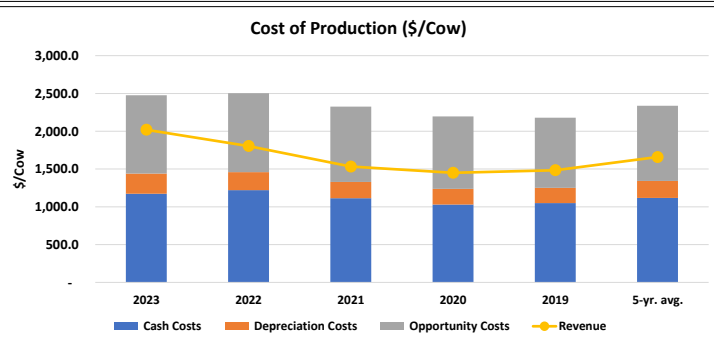
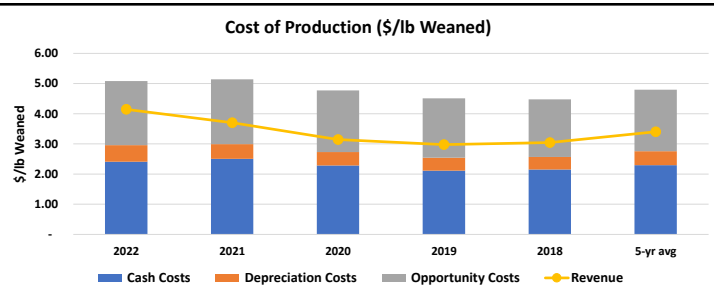
Footnotes:

Cost of Production: Cash Cost + Depreciation + Opportunity Costs

Cash Costs = Cash cost for purchased feed, fertiliser, seeds, fuel, maintenance, land rents, animal purchases, interest on liabilities, wages paid, veterinary costs plus medicine, water, insurance, accounting, etc (excl. Tax)

Depreciation = Linear depreciation on machinery and buildings, calculated on replacement values

Opportunity Costs = Calculated cost for using own production factors like labour (family working hours * wage for qualified local labour, land (own land * regional land rents) and capital (non-land equity * long-term government bonds interest rate)



Whole Farm Overview Page

Overview							
Operation Maturity	Medium						
Herd Size	60			Beef Animals Sold from Retained Ownership	N/A		
Paid Labour (livestock only) (hours)	300						
Unpaid Labour (livestock only) (hours)	1,505						
Average wages - paid and unpaid (\$/hr)	24.47						
Revenue		2023	2022	2021	2020	2019	5-yr. avg.
Market Revenue	5-yr avg	105,717	76,230	64,776	63,167	62,328	74,443
Cow-Calf	75%	105,717	76,230	64,776	63,167	62,328	74,443
Cash Crops	0%	-	-	-	-	-	-
Retained Ownership	0%	-	-	-	-	-	-
Government Payments	25%	15,435	32,033	27,167	23,837	26,708	25,036
Other Farm Revenue †	0%	138	37	5	14	20	43
Total Revenue	100%	121,290	108,300	91,947	87,018	89,055	99,522
Change in Inventory		-	-	-	-	-	-
Expenses		2023	2022	2021	2020	2019	5-yr. avg.
Depreciation		15,998	14,227	12,929	12,473	12,115	13,549
Machinery		11,867	10,317	9,272	8,953	8,655	9,813
Buildings		4,131	3,911	3,657	3,520	3,461	3,736
Quota econ. Accounting		-	-	-	-	-	-
Overhead costs		30,991	32,620	27,528	24,758	26,285	28,436
Land improvement		534	512	483	461	458	490
Machinery Maintenance		6,512	6,896	6,335	6,138	6,056	6,387
Buildings Maintenance		4,194	3,650	3,541	3,336	3,324	3,609
Contract labour		3,194	3,038	3,132	3,038	2,906	3,062
Diesel, Gasoline, Natural Gas		8,606	10,432	6,426	4,425	6,336	7,245
Electricity		754	731	636	627	655	681
Water		-	-	-	-	-	-
Farm insurance		3,367	3,478	3,302	3,186	3,090	3,285
Disability and accident insurance		-	-	-	-	-	-
Farm taxes and duties		983	1,016	964	930	902	959
Advisor costs		653	675	641	618	599	637
Accountant & legal fees		1,154	1,192	1,132	1,092	1,059	1,126
Phone & utilities		1,039	1,000	937	906	900	957
Other overhead costs		-	-	-	-	-	-
Wages, rent and interest payments		9,211	9,947	10,382	9,284	8,976	9,560
Paid Labour		6,118	6,320	6,000	5,788	5,615	5,968
Total land rents		-	-	-	-	-	-
Total Interest on debt		3,093	3,628	4,382	3,496	3,361	3,592
Cow-Calf		25,033	25,392	24,139	23,326	23,202	24,218
Animal purchases		15,650	15,650	15,650	15,650	15,650	15,650
Purchased feed		3,614	3,824	2,983	2,406	2,242	3,014
Other fixed and var. costs *		5,768	5,918	5,506	5,271	5,309	5,554
Retained Ownership		-	-	-	-	-	-
Animal purchases		-	-	-	-	-	-
Purchased feed		-	-	-	-	-	-
Other fixed and var. costs *		-	-	-	-	-	-
Crop and forage		5,198	5,337	4,751	4,444	4,501	4,846
Seed		394	372	355	344	363	365
Fertilizer		2,205	2,463	2,053	1,833	1,887	2,088
Herbicide		-	-	-	-	-	-
Fungicide & Insecticide		-	-	-	-	-	-
Irrigation		-	-	-	-	-	-
Contract labour		-	-	-	-	-	-
Fuel costs (crop & forage)		-	-	-	-	-	-
Other crop and forage		2,600	2,502	2,343	2,267	2,250	2,392
Total Farm Costs (excludes unpaid labour)		86,430	87,524	79,729	74,286	75,078	80,609
Cash Costs (Total Farm Costs - Depreciation)		70,432	73,296	66,799	61,812	62,963	67,061
Depreciation & Opportunity Costs (including unpaid labour)		52,831	51,061	49,763	49,307	48,948	50,382
Total Economic Costs (cash, depr, opportunity)		123,264	124,357	116,562	111,119	111,912	117,443
Profits		2023	2022	2021	2020	2019	5-yr. avg.
Net Income (Total Revenue - Total Farm Costs + Change in Inv.)		34,859	20,777	12,219	12,732	13,977	18,913
Net Cash Farm Income (excludes depreciation)		50,719	34,967	25,143	25,192	26,072	32,419

† Other Farm Revenue includes: Other enterprises, capital gains and losses as well as calculated interest on savings based on the models previous year profits.

*Other fixed and var. costs includes: veterinary, medicine, maintenance and spare parts, and other/miscellaneous



Cow-Calf Enterprise (\$/Cow)	2023	2022	2021	2020	2019	5 yr. avg.
No. of Cows*	60	60	60	60	60	60
Average male and female calf price (\$/head)	1,713	1,215	1,044	1,015	998	1,197
REVENUE						
Cow Calf	2,019	1,804	1,532	1,450	1,484	1,658
Cull animals and slaughter receipts	220	177	140	140	141	164
Breeding livestock receipts	-	-	-	-	-	-
Calf Sales and transfer to retained ownership enterprise	1,541	1,093	940	913	898	1,077
Government payments	257.2	533.9	452.8	397.3	445.1	417.3
Other returns	-	-	-	-	-	-
Total Cow-Calf Revenue	2,019	1,804	1,532	1,450	1,484	1,658
VARIABLE COSTS						
Animal purchases	260.8	260.8	260.8	260.8	260.8	261
Feed (purchase feed, fertiliser, seed, pesticides)	155.8	161.2	136.9	121.8	120.0	139
Machinery (maintenance, depreciation, contractor)	359.5	337.5	312.3	302.2	293.6	321
Fuel, energy, lubricants, water	156.0	186.0	117.7	84.2	116.5	132
Vet & medicine	33.8	34.4	32.3	30.9	30.0	32
Other inputs cow calf enterprise	105.4	107.5	100.3	96.4	97.1	101
Labour						
Paid Labour	102.0	105.3	100.0	96.5	93.6	99
Unpaid Labour	716.2	739.8	702.3	677.5	657.3	699
Total Variable Costs	1,889.5	1,932.5	1,762.7	1,670.3	1,668.9	1,785
CAPITAL COSTS						
Insurance, taxes	76.9	79.5	75.4	72.8	70.6	75
Buildings (maintenance, depreciation)	138.8	126.0	120.0	114.3	113.1	122
Land Cost	-	-	-	-	-	-
Rented Land	-	-	-	-	-	-
Own Land	225.7	208.1	195.0	184.1	176.8	198
Capital Costs	-	-	-	-	-	-
Liabilities	51.5	60.4	73.0	58.3	56.0	60
Own capital	94.7	97.1	99.6	96.9	94.5	97
Total Capital Costs	587.6	571.2	563.0	526.4	511.0	552
COSTS						
Cash Costs	1,173.8	1,221.6	1,113.3	1,030.2	1,049.4	1,118
Depreciation Costs	266.6	237.1	215.5	207.9	201.9	226
Opportunity Costs	1,036.6	1,045.0	996.9	958.6	928.6	993
Total Production Costs	2,477.1	2,503.7	2,325.7	2,196.7	2,179.9	2,337
Profits						
	2023	2022	2021	2020	2019	5-yr. avg.
Short-term profit (cash costs)	845.4	582.8	419.1	419.9	434.5	540
Medium-term profit (cash + depreciation)	578.8	345.7	203.6	212.0	232.6	315
Long-term profit (cash + depreciation + opportunity)	(457.9)	(699.3)	(793.3)	(746.6)	(695.9)	(679)

*Model Maintains a stable herd size

Costs and revenue are reported for a calendar (e.g. January to December). It reflects revenue and expenses that a producer experiences over that period. Producers who want a cash flow analysis typically use a calendar or agricultural year. This method is often preferred by lenders when getting evaluated for a line of credit or a loan. The model maintains a stable herd, retention rates were adjusted to ensure that.

Cash Costs

Cash costs are the outlays over the course of the year, including machine repairs, paid labour, costs of feed production, and purchased feed. CDN COP Network bases cash costs on actual costs of production. AgriProfit\$ uses the market value for some cash costs, including feed.

The cost of producing the feed on-farm and the purchased feed costs as used in that year to reflect the experience and situation of producers. Production inputs, land and any purchased feeds utilized that year are included.

Rations for each type of animal and inventories are used to calculate total feed requirements. Any shortfall in production are assumed to be purchased at market value. Feed rations and yields are provided "as fed" to balance the model. Below are the included costs for feed production:

Feed: Calculated as feed cost (purchase feed + fertilizer, seed and pesticides for own feed production) + machinery cost (machinery maintenance + depreciation + contractor) + fuel, energy, lubricants and water + land cost (land rents paid + opportunity cost own land)

Land: separated into owned and rented land, includes both crop and pastureland. Land costs = Rents paid + calculated land rents for own land (opportunity cost).

By using the cost of land, the advantage that mature operations have is clearly shown as their cost structure is lower when land has been fully paid off.

Allocation

Generic allocation uses percent revenues from each commodity to cover overheads and utilizes accounting data for the overhead costs. This takes the approach that overheads and fixed costs will be covered by something grown on the farm and recognizes that there are commodity price cycles where grains and livestock tend to be opposite. It is not so much concerned about each enterprise paying their way as that all overheads are covered by the mix of commodities grown. It should be recognized that as commodity prices fluctuate and revenues to each enterprise fluctuate, the shifting shares will change the cost structure for each enterprise from year to year.

Depreciation

Depreciation on buildings and machinery is a non-cash cost that reveals the ability of the farm to continue operating if an asset needs replacement.

Differences in depreciation costs between AgriProfit\$ and the CDN COP Network primarily comes from the use of specific (AgriProfit\$) versus generic (CDN COP Network) allocation. Where generic allocation results in machinery depreciation used for feed production to show up in the cow-calf enterprise as that is where revenue is generated. In contrast, specific allocation removes that cost and since feed is treated at market value, machinery depreciation for feed production is treated as a cash cost. This results in the CDN COP Network typically having lower cash costs and higher depreciation costs than what is reported in AgriProfit\$.

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Unit Reported

Often cow-calf COP is expressed as dollars per cow wintered (\$/cow wintered) which adjusts the calf price per head for the number of calves sold per 100 cows. When evaluating overall cost structure to identify areas for improvement, or comparing to a benchmark, this is sufficient.

However, a per unit cost provides producers with their break-even cost, allowing them to compare with posted market prices for their calves' average weight category. This break-even price will depend on the percentage of calves weaned that year from the cow herd. The higher percent weaned, the lower per pound the break-even price will be.



Cow-Calf Enterprise (\$/lb Weaned)	2023	2022	2021	2020	2019	5 yr. avg.
Pounds Weaned	29,225	29,225	29,225	29,225	29,225	29,225
Average male and female weaning weight (lbs)	541	541	541	541	541	
Average male and female calf price at weaning (\$/lb)	3.16	2.24	1.93	1.87	1.84	2.21
REVENUE						
Cow Calf Operation	4.15	3.70	3.15	2.98	3.05	3.40
Cull animals and slaughter receipts	0.45	0.36	0.29	0.29	0.29	0.34
Breeding livestock receipts	-	-	-	-	-	-
Calf Sales and transfer to retained ownership enterprise	3.16	2.24	1.93	1.87	1.84	2.21
Government payments	0.53	1.10	0.93	0.82	0.91	0.86
Other returns	-	-	-	-	-	-
Total Cow-Calf Revenue	4.15	3.70	3.15	2.98	3.05	3.40
VARIABLE COSTS						
Animal purchases	0.54	0.54	0.54	0.54	0.54	0.54
Feed (purchase feed, fertiliser, seed, pesticides)	0.32	0.33	0.28	0.25	0.25	0.29
Machinery (maintenance, depreciation, contractor)	0.74	0.69	0.64	0.62	0.60	0.66
Fuel, energy, lubricants, water	0.32	0.38	0.24	0.17	0.24	0.27
Vet & medicine	0.07	0.07	0.07	0.06	0.06	0.07
Other inputs cow calf enterprise	0.22	0.22	0.21	0.20	0.20	0.21
Labour						
Paid Labour	0.21	0.22	0.21	0.20	0.19	0.20
Unpaid Labour	1.47	1.52	1.44	1.39	1.35	1.43
Total Variable Costs	3.9	4.0	3.6	3.4	3.4	3.7
CAPITAL COSTS						
Insurance, taxes	0.16	0.16	0.15	0.15	0.14	0.15
Buildings (maintenance, depreciation)	0.28	0.26	0.25	0.23	0.23	0.25
Land Cost						
Rented Land	-	-	-	-	-	-
Owned Land	0.46	0.43	0.40	0.38	0.36	0.41
Capital Costs						
Liabilities	0.11	0.12	0.15	0.12	0.11	0.12
Own capital	0.19	0.20	0.20	0.20	0.19	0.20
Total Capital Costs	1.2	1.2	1.2	1.1	1.0	1.1
COSTS						
Cash Costs	2.41	2.51	2.29	2.12	2.15	2.29
Depreciation Costs	0.55	0.49	0.44	0.43	0.41	0.46
Opportunity Costs	2.13	2.15	2.05	1.97	1.91	2.04
Total Production Costs	5.09	5.14	4.77	4.51	4.48	4.80
Profits	2023	2022	2021	2020	2019	5-yr. avg.
Short-term profit (cash costs)	1.74	1.20	0.86	0.86	0.89	1.11
Medium-term profit (cash + depreciation)	1.19	0.71	0.42	0.44	0.48	0.65
Long-term profit (cash + depreciation + opportunity)	(0.94)	(1.44)	(1.63)	(1.53)	(1.43)	(1.39)

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