

Farm Characteristics

CA-MT-6

Farm Description	A pure bred operation with 48 head of beef cows, selling weaned calves and breeding cattle, producing homegrown feed.
Winter Feeding Ration (lbs/cow/day as fed)	210 days on grass silage (40 lb) and hay (10 lb)
Retained Ownership/Replacement Ration (lb/head/day as fed)	Bull calves are fed in a custom feeding operation

Disclaimer:

This benchmark is based on 3 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	6°C
Average Annual Precipitation (mm)	1000-1600mm
Ecoregion	•Nova Scotia Highland Ecoregion
Stocking Rate (Animal Unit days per acre)	96
Fertilize Hay (yes/no)	yes
Fertilize Pasture (yes/no)	no
Typical Hay Yield (tonnes/acre)	1.5
Grassland Acres (owned+rented)	138
Crop Acres (includes hay) (owned+rented)	135
Bush and other acres	314

Physical Performance Indicators	
Breed	Pure-bred Angus
Cow:Bull Ratio	21:1
Bull Culling Rate (%)	21%
Mature Cow Weight (lb)	1,500
Heifer Retention for a steady herd (%)	10%
Cow Death Loss (%)	0.3%
Cow Culling Rate (%)	11.0%
Calves alive after 24hr/100 Cows exposed	81
Calf Death Loss (%) 24 hr to weaning	2%
Calves weaned per 100 cows exposed	81
Total Liveweight Sold per Cow (lb)	673
Weaning Weight (lb)	649
205 day adjusted Weaning Weight (lb)	545
Average Daily Gain pre-weaning (lb)	2.25
Weaning Weight as % of Cow Weight	43%

Production System	
Herd size	48
Days on field feeding (e.g. swath grazing)	0
Days supplemented on pasture	0
Days on full winter feed	210
Calving Start date	March 23
Weaning date	December 20
Sale date	December 20
Retained ownership	Breeding Bulls
% of feed purchased	0.8%
% of land in crops	23%
Annual sales Retained Cattle (head)	4
Placement weight (lbs)	691
Sale Weight (lbs)	1,450
Days on feed	140
Days on grass	120

Footnotes:

Cost of Production: Cash Cost + Depreciation + Opportunity Costs

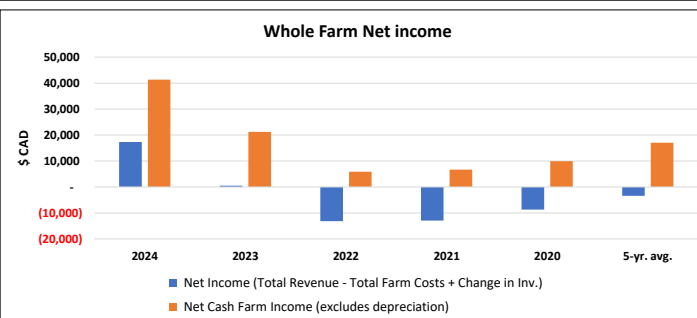
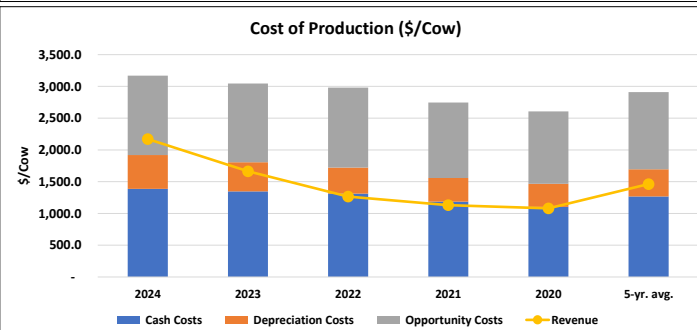
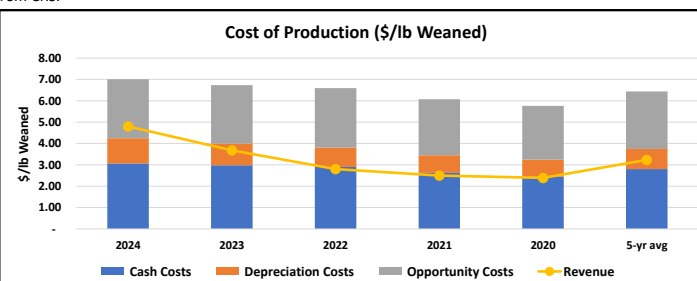
Cash Costs = Cash cost for purchased feed, fertiliser, seeds, fuel, maintenance, land rents, animal purchases, interest on liabilities, wages paid, veterinary costs plus medicine, water, insurance, accounting, etc (excl. Tax)

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 Profitability = Market returns (+ coupled payments) (+ decoupled payments) - whole-farm costs +/- changes in inventory +/- capital gains/losses.

Whole Farm Net Income = Whole farm profitability + depreciation + changes in inventory + capital gains/losses. Known as: 'Net farm income' (Agri Profits, 2018)



Whole Farm Overview Page

Overview							
Operation Maturity	Mature						
Herd Size	48						
Paid Labour (livestock only) (hours)	0			Beef Animals Sold from Retained Ownership	4		
Unpaid Labour (livestock only) (hours)	2,080						
Average wages - paid and unpaid (\$/hr)	23.96						
Revenue		2024	2023	2022	2021	2020	5-yr. avg.
Market Revenue	5-yr avg	120,206	95,859	76,787	70,301	67,699	86,170
Cow-Calf	78%	104,201	79,854	60,782	54,296	51,875	70,201
Cash Crops	0%	-	-	-	-	-	-
Retained Ownership	18%	16,005	16,005	16,005	16,005	15,824	15,969
Government Payments	4%	4,015	4,015	4,015	4,015	4,015	4,015
Other Farm Revenue †	0%	13	5	0	0	0	4
Total Revenue	100%	124,233	99,879	80,802	74,316	71,714	90,189
Change in Inventory		1,506	1,267	619	(1,743)	(1,237)	82
Expenses		2024	2023	2022	2021	2020	5-yr. avg.
Depreciation		25,542	21,979	19,646	17,896	17,400	20,493
Machinery		18,192	15,023	13,060	11,738	11,347	13,872
Buildings		7,350	6,956	6,585	6,158	6,053	6,620
Quota econ. Accounting		-	-	-	-	-	-
Overhead costs		33,441	32,337	31,226	27,876	26,297	30,235
Land improvement		4,211	3,924	3,629	3,200	3,027	3,598
Machinery Maintenance		6,184	5,473	4,843	4,286	4,125	4,982
Buildings Maintenance		10,959	10,834	10,491	9,216	8,565	10,013
Contract labour		57	57	58	55	-	45
Diesel, Gasoline, Natural Gas		702	847	1,009	600	392	710
Electricity		1,035	988	877	762	768	886
Water		-	-	-	-	-	-
Farm insurance		2,612	2,612	2,697	2,561	2,470	2,590
Disability and accident insurance		-	-	-	-	-	-
Farm taxes and duties		2,590	2,590	2,675	2,540	2,450	2,569
Advisor costs		121	121	125	119	115	120
Accountant & legal fees		1,613	1,613	1,666	1,582	1,526	1,600
Phone & utilities		2,248	2,196	2,113	1,979	1,915	2,090
Other overhead costs		1,109	1,083	1,042	976	944	1,031
Wages, rent and interest payments		7,685	7,726	7,659	7,361	7,106	7,508
Paid Labour		0	0	0	0	0	0
Total land rents		6,561	6,237	5,919	5,750	5,653	6,024
Total interest on debt		1,124	1,489	1,740	1,612	1,453	1,484
Cow-Calf		17,683	16,986	16,638	14,925	13,210	15,889
Animal purchases		2,970	2,333	1,930	1,645	1,645	2,105
Purchased feed		3,606	3,561	3,235	2,745	1,688	2,967
Other fixed and var. costs *		11,107	11,093	11,473	10,535	9,878	10,817
Retained Ownership		16,114	13,827	11,812	10,567	8,645	12,193
Animal purchases		9,937	7,786	5,976	5,091	3,614	6,481
Purchased feed		-	-	-	-	-	-
Other fixed and var. costs *		6,178	6,042	5,836	5,476	5,031	5,712
Crop and forage		7,939	7,774	7,582	6,901	6,533	7,346
Seed		2,138	2,044	1,788	1,683	1,610	1,853
Fertilizer		1,786	1,808	2,020	1,683	1,503	1,760
Herbicide		-	-	-	-	-	-
Fungicide & Insecticide		-	-	-	-	-	-
Irrigation		-	-	-	-	-	-
Contract labour		-	-	-	-	-	-
Fuel costs (crop & forage)		-	-	-	-	-	-
Other crop and forage		4,015	3,921	3,774	3,535	3,420	3,733
Total Farm Costs (excludes unpaid labour)		108,404	100,629	94,564	85,527	79,191	93,663
Cash Costs (Total Farm Costs - Depreciation)		82,863	78,650	74,918	67,630	61,791	73,171
Depreciation & Opportunity Costs (including unpaid labour)		75,387	71,824	69,491	67,741	67,246	70,338
Total Economic Costs (cash, depr, opportunity)		158,250	150,475	144,409	135,372	129,037	143,508
Profits		2024	2023	2022	2021	2020	5-yr. avg.
Net Income (Total Revenue - Total Farm Costs + Change in Inv.)		17,335	516	(13,142)	(12,954)	(8,714)	(3,392)
Net Cash Farm Income (excludes depreciation)		41,358	21,224	5,884	6,685	9,923	17,015

† 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)	2024	2023	2022	2021	2020	5 yr. avg.
No. of Cows*	48	48	48	48	48	48
Average male and female calf price (\$/head)	2,113	1,673	1,287	1,133	1,065	1,454
REVENUE						
Cow Calf	2,171	1,664	1,266	1,131	1,081	1,463
Cull animals and slaughter receipts	268	205	160	130	131	179
Breeding livestock receipts	396	269	191	202	194	250
Calf Sales and transfer to retained ownership enterprise	1,507	1,190	915	799	756	1,033
Government payments	-	-	-	-	-	-
Other returns	-	-	-	-	-	-
Total Cow-Calf Revenue	2,171	1,664	1,266	1,131	1,081	1,463
VARIABLE COSTS						
Animal purchases	61.9	48.6	40.2	34.3	34.3	44
Feed (purchase feed, fertiliser, seed, pesticides)	328.3	317.9	301.0	267.6	234.3	290
Machinery (maintenance, depreciation, contractor)	509.0	428.2	374.2	335.0	322.3	394
Fuel, energy, lubricants, water	40.9	43.1	44.1	32.0	28.1	38
Vet & medicine	75.0	74.2	73.4	71.1	65.5	72
Other inputs cow calf enterprise	257.8	256.4	263.9	241.7	230.0	250
Labour						
Paid Labour	-	-	-	-	-	-
Unpaid Labour	1,038.4	1,038.4	1,072.6	1,018.3	982.3	1,030
Total Variable Costs	2,311.2	2,206.9	2,169.3	2,000.1	1,897.0	2,117
CAPITAL COSTS						
Insurance, taxes	108.4	108.4	111.9	106.3	102.5	107
Buildings (maintenance, depreciation)	381.4	370.6	355.8	320.3	304.5	347
Land Cost	-	-	-	-	-	-
Rented Land	134.1	127.4	120.9	117.4	115.4	123
Own Land	204.7	194.0	182.5	163.7	152.9	180
Capital Costs	-	-	-	-	-	-
Liabilities	23.4	31.0	36.3	33.6	30.3	31
Own capital	7.0	6.1	5.4	5.0	4.3	6
Total Capital Costs	859.0	837.6	812.7	746.2	710.0	793
COSTS						
Cash Costs	1,388.0	1,347.9	1,312.3	1,186.4	1,104.9	1,268
Depreciation Costs	532.1	457.9	409.3	372.8	362.5	427
Opportunity Costs	1,250.2	1,238.6	1,260.4	1,187.0	1,139.6	1,215
Total Production Costs	3,170.3	3,044.5	2,982.0	2,746.2	2,606.9	2,910
Profits	2024	2023	2022	2021	2020	5-yr. avg.
Short-term profit (cash costs)	782.9	315.7	(46.0)	(55.3)	(24.1)	195
Medium-term profit (cash + depreciation)	250.8	(142.2)	(455.2)	(428.1)	(386.6)	(232)
Long-term profit (cash + depreciation + opportunity)	(999.4)	(1,380.8)	(1,715.7)	(1,615.1)	(1,526.2)	(1,447)

*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. Agri Profit\$ 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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Land: The Opportunity costs of land are the rents for new contracts if the farm rents out owned land. It reflects the future cost of renting land. If the producers' profits of utilizing the land outweigh the profits of renting the land, utilizing owned land for production should be preferred and vice-versa.

Labour: The opportunity costs of labour are the calculated wage for family labour, either off-farm salary or farm manager salary. It is important to note that the opportunity cost of labour reflects the income you can receive for the same type of labour.

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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)	2024	2023	2022	2021	2020	5 yr. avg.
Pounds Weaned	21,706	21,706	21,706	21,706	21,706	21,706
Average male and female weaning weight (lbs)	649	649	649	649	649	649
Average male and female calf price at weaning (\$/lb)	3.26	2.58	1.98	1.75	1.64	2.24
REVENUE						
Cow Calf Operation	4.80	3.68	2.80	2.50	2.39	3.23
Cull animals and slaughter receipts	0.59	0.45	0.35	0.29	0.29	0.40
Breeding livestock receipts	0.88	0.59	0.42	0.45	0.43	0.55
Calf Sales and transfer to retained ownership enterprise	3.33	2.63	2.02	1.77	1.67	2.29
Government payments	-	-	-	-	-	-
Other returns	-	-	-	-	-	-
Total Cow-Calf Revenue	4.80	3.68	2.80	2.50	2.39	3.23
VARIABLE COSTS						
Animal purchases	0.14	0.11	0.09	0.08	0.08	0.10
Feed (purchase feed, fertiliser, seed, pesticides)	0.73	0.70	0.67	0.59	0.52	0.64
Machinery (maintenance, depreciation, contractor)	1.13	0.95	0.83	0.74	0.71	0.87
Fuel, energy, lubricants, water	0.09	0.10	0.10	0.07	0.06	0.08
Vet & medicine	0.17	0.16	0.16	0.16	0.14	0.16
Other inputs cow calf enterprise	0.57	0.57	0.58	0.53	0.51	0.55
Labour						
Paid Labour	-	-	-	-	-	-
Unpaid Labour	2.30	2.30	2.37	2.25	2.17	2.28
Total Variable Costs	5.1	4.9	4.8	4.4	4.2	4.7
CAPITAL COSTS						
Insurance, taxes	0.24	0.24	0.25	0.24	0.23	0.24
Buildings (maintenance, depreciation)	0.84	0.82	0.79	0.71	0.67	0.77
Land Cost						
Rented Land	0.30	0.28	0.27	0.26	0.26	0.27
Owned Land	0.45	0.43	0.40	0.36	0.34	0.40
Capital Costs						
Liabilities	0.05	0.07	0.08	0.07	0.07	0.07
Own capital	0.02	0.01	0.01	0.01	0.01	0.01
Total Capital Costs	1.9	1.9	1.8	1.7	1.6	1.8
COSTS						
Cash Costs	3.07	2.98	2.90	2.62	2.44	2.80
Depreciation Costs	1.18	1.01	0.91	0.82	0.80	0.94
Opportunity Costs	2.76	2.74	2.79	2.62	2.52	2.69
Total Production Costs	7.01	6.73	6.59	6.07	5.77	6.44
Profits	2024	2023	2022	2021	2020	5-yr. avg.
Short-term profit (cash costs)	1.73	0.70	(0.10)	(0.12)	(0.05)	0.43
Medium-term profit (cash + depreciation)	0.55	(0.31)	(1.01)	(0.95)	(0.86)	(0.51)
Long-term profit (cash + depreciation + opportunity)	(2.21)	(3.05)	(3.79)	(3.57)	(3.38)	(3.20)

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