



Farm Characteristics	CA-BC-4
Farm Description	A cow-calf operation with 88 head of beef cows, producing predominantly homegrown feed on irrigated land and sell hay.
Winter Feeding Ration (lbs/cow/day as fed)	195 days of winter feeding on mixed grass hay (35 lb)
Retained Ownership/Replacement Ration (lb/head/day as fed)	Replacement heifers: 195 days of winter feeding on alfalfa grass hay (10 lb) and 50/50 corn barley protein ration (5 lb)
Disclaimer:	This benchmark is based on 4 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	3°C
Average Annual Precipitation (mm)	250-600
	Fraser Plateau
Ecoregion	Ecoregion
Stocking Rate (Animal Unit days per acre)	34
Fertilize Hay (yes/no)	Yes
Fertilize Pasture (yes/no)	No
Typical Hay Yield (tonnes/acre)	2.7
Grassland Acres (owned+rented)	756
Crop Acres (includes hay) (owned+rented)	131
Bush and other acres	0

Physical Performance Indicators	
	Angus, Limousin, Hereford
Breed	Hereford
Cow:Bull Ratio	21:1
Bull Culling Rate (%)	22%
Mature Cow Weight (lb)	1,500
Heifer Retention for a steady herd (%)	10%
Cow Death Loss (%)	0.5%
Cow Culling Rate (%)	9.8%
Calves alive after 24hr/100 Cows exposed	95
Calf Death Loss (%) 24 hr to weaning	1%
Calves weaned per 100 cows exposed	95
Total Liveweight Sold per Cow (lb)	637
Weaning Weight (lb)	549
205 day adjusted Weaning Weight (lb)	523
Average Daily Gain pre-weaning (lb)	2.14
Weaning Weight as % of Cow Weight	37%

Production System	
Herd size	88
Days on field feeding (e.g. swath grazing)	0
Days supplemented on pasture	0
Days on full winter feed	195
Calving Start date	March 12
Weaning date	November 05
Sale date	November 05
Retained ownership	Replacements
% of feed purchased	2.9%
% of land in crops	15%
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

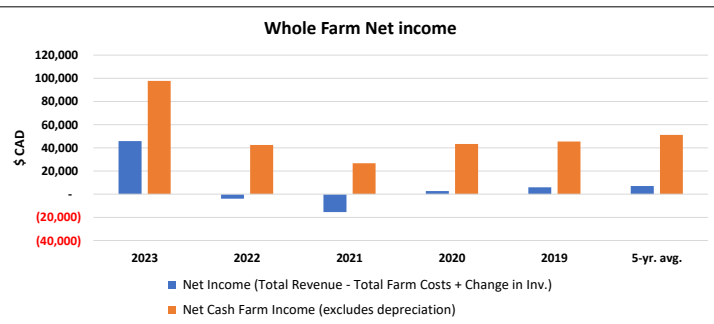
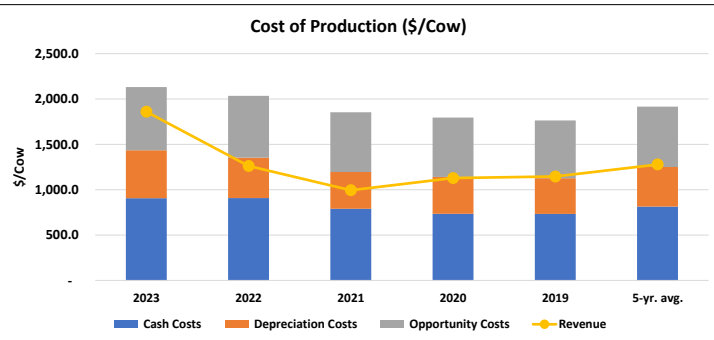
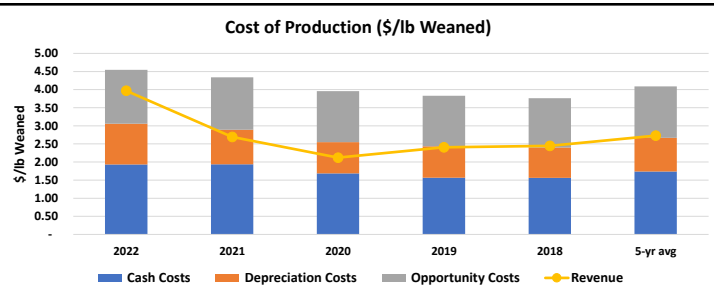
Footnotes:

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	Mature						
Herd Size	88			Beef Animals Sold from Retained Ownership		N/A	
Paid Labour (livestock only) (hours)	-						
Unpaid Labour (livestock only) (hours)	1,165						
Average wages - paid and unpaid (\$/hr)	24.22						
Revenue		2023	2022	2021	2020	2019	5-yr. avg.
Market Revenue	5-yr avg	181,081	128,935	101,584	111,183	113,333	127,223
Cow-Calf	87%	163,653	111,018	87,498	99,266	100,826	112,452
Cash Crops	11%	17,428	17,917	14,086	11,917	12,507	14,771
Retained Ownership	0%	-	-	-	-	-	-
Government Payments	0%	-	-	-	-	-	-
Other Farm Revenue †	1%	1,945	1,925	1,925	1,925	1,926	1,929
Total Revenue	100%	183,026	130,861	103,509	113,108	115,258	129,152
Change in Inventory		-	-	-	-	-	-
Expenses		2023	2022	2021	2020	2019	5-yr. avg.
Depreciation		51,897	46,335	42,186	40,692	39,555	44,133
Machinery		36,161	31,438	28,256	27,282	26,373	29,902
Buildings		15,736	14,897	13,930	13,410	13,182	14,231
Quota econ. Accounting		-	-	-	-	-	-
Overhead costs		42,890	44,719	35,277	31,558	33,448	37,578
Land improvement		4,103	3,872	3,411	3,277	3,270	3,587
Machinery Maintenance		8,964	8,404	7,209	6,976	6,897	7,690
Buildings Maintenance		2,450	2,329	2,108	2,011	2,024	2,184
Contract labour		-	-	-	-	-	-
Diesel, Gasoline, Natural Gas		13,209	16,203	9,706	7,024	9,280	11,084
Electricity		1,409	975	591	435	425	767
Water		220	218	218	218	218	218
Farm insurance		4,503	4,651	4,416	4,259	4,132	4,392
Disability and accident insurance		-	-	-	-	-	-
Farm taxes and duties		2,588	2,673	2,538	2,448	2,375	2,524
Advisor costs		204	211	200	193	187	199
Accountant & legal fees		1,990	2,056	1,952	1,883	1,827	1,941
Phone & utilities		2,856	2,749	2,574	2,491	2,473	2,629
Other overhead costs		394	379	355	344	341	363
Wages, rent and interest payments		11,727	13,267	14,010	12,882	12,108	12,799
Paid Labour		-	-	-	-	-	-
Total land rents		7,570	7,570	7,570	7,570	7,570	7,570
Total Interest on debt		4,157	5,697	6,440	5,312	4,538	5,229
Cow-Calf		20,957	19,910	18,488	17,137	15,944	18,487
Animal purchases		5,625	5,625	5,625	5,625	5,625	5,625
Purchased feed		6,823	6,213	5,700	4,947	4,354	5,607
Other fixed and var. costs *		8,509	8,072	7,163	6,565	5,965	7,255
Retained Ownership		-	-	-	-	-	-
Animal purchases		-	-	-	-	-	-
Purchased feed		-	-	-	-	-	-
Other fixed and var. costs *		-	-	-	-	-	-
Crop and forage		9,736	10,558	9,008	8,164	8,340	9,161
Seed		1,551	1,468	1,397	1,347	1,329	1,418
Fertilizer		7,840	8,757	7,299	6,516	6,711	7,425
Herbicide		-	-	-	-	-	-
Fungicide & Insecticide		-	-	-	-	-	-
Irrigation		-	-	-	-	-	-
Contract labour		-	-	-	-	-	-
Fuel costs (crop & forage)		-	-	-	-	-	-
Other crop and forage		346	333	312	302	299	318
Total Farm Costs (excludes unpaid labour)		137,207	134,788	118,969	110,432	109,394	122,158
Cash Costs (Total Farm Costs - Depreciation)		85,310	88,453	76,783	69,740	69,840	78,025
Depreciation & Opportunity Costs (including unpaid labour)		80,122	74,559	70,410	68,917	67,780	72,358
Total Economic Costs (cash, depr, opportunity)		165,432	163,013	147,193	138,657	137,619	150,383
Profits		2023	2022	2021	2020	2019	5-yr. avg.
Net Income (Total Revenue - Total Farm Costs + Change in Inv.)		45,819	(3,927)	(15,460)	2,676	5,864	6,994
Net Cash Farm Income (excludes depreciation)		97,697	42,407	26,726	43,368	45,418	51,123

† 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*	88	88	88	88	88	88
Average male and female calf price (\$/head)	1,900	1,297	1,028	1,172	1,182	1,316
REVENUE						
Cow Calf	1,860	1,262	994	1,128	1,146	1,278
Cull animals and slaughter receipts	222	142	107	119	129	144
Breeding livestock receipts	-	-	-	-	-	-
Calf Sales and transfer to retained ownership enterprise	1,637	1,120	888	1,009	1,017	1,134
Government payments	-	-	-	-	-	-
Other returns	-	-	-	-	-	-
Total Cow-Calf Revenue	1,860	1,262	994	1,128	1,146	1,278
VARIABLE COSTS						
Animal purchases	63.9	63.9	63.9	63.9	63.9	64
Feed (purchase feed, fertiliser, seed, pesticides)	222.4	215.4	189.2	174.2	168.8	194
Machinery (maintenance, depreciation, contractor)	458.6	384.1	340.7	341.7	330.7	371
Fuel, energy, lubricants, water	156.9	173.7	104.5	79.1	101.1	123
Vet & medicine	62.5	58.5	52.6	47.8	41.4	53
Other inputs cow calf enterprise	83.4	79.2	74.0	73.2	71.9	76
Labour						
Paid Labour	-	-	-	-	-	-
Unpaid Labour	330.4	323.8	306.3	306.7	296.6	313
Total Variable Costs	1,378.1	1,298.6	1,131.3	1,086.6	1,074.5	1,194
CAPITAL COSTS						
Insurance, taxes	74.7	74.5	70.6	69.8	67.6	71
Buildings (maintenance, depreciation)	184.8	166.1	154.1	153.8	151.2	162
Land Cost	-	-	-	-	-	-
Rented Land	84.7	84.1	84.1	84.5	84.4	84
Own Land	237.4	231.8	226.7	218.3	214.3	226
Capital Costs	-	-	-	-	-	-
Liabilities	42.2	54.9	61.9	53.0	45.1	51
Own capital	129.5	124.5	125.8	128.6	126.4	127
Total Capital Costs	753.3	735.8	723.1	707.9	689.0	722
COSTS						
Cash Costs	906.7	907.8	790.3	735.1	733.0	815
Depreciation Costs	527.4	446.7	405.2	405.8	393.2	436
Opportunity Costs	697.3	680.0	658.8	653.6	637.4	665
Total Production Costs	2,131.4	2,034.5	1,854.4	1,794.6	1,763.6	1,916
Profits						
	2023	2022	2021	2020	2019	5-yr. avg.
Short-term profit (cash costs)	953.0	353.8	204.0	392.9	412.8	463
Medium-term profit (cash + depreciation)	425.6	(92.9)	(201.3)	(12.9)	19.6	28
Long-term profit (cash + depreciation + opportunity)	(271.7)	(772.9)	(860.1)	(666.6)	(617.8)	(638)

*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\$.

Opportunity Costs

Opportunity costs are the non-cash costs that reveal the opportunity of using different resources. These costs can include Unpaid labour, renting out land, the opportunity of selling or buying feed production, and return to own capital.

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)	2023	2022	2021	2020	2019	5 yr. avg.
Pounds Weaned	41,242	41,242	41,242	41,242	41,242	41,242
Average male and female weaning weight (lbs)	549	549	549	549	549	
Average male and female calf price at weaning (\$/lb)	3.46	2.36	1.87	2.14	2.15	2.40
REVENUE						
Cow Calf Operation	3.97	2.69	2.12	2.41	2.44	2.73
Cull animals and slaughter receipts	0.47	0.30	0.23	0.25	0.27	0.31
Breeding livestock receipts	-	-	-	-	-	-
Calf Sales and transfer to retained ownership enterprise	3.49	2.39	1.89	2.15	2.17	2.42
Government payments	-	-	-	-	-	-
Other returns	-	-	-	-	-	-
Total Cow-Calf Revenue	3.97	2.69	2.12	2.41	2.44	2.73
VARIABLE COSTS						
Animal purchases	0.14	0.14	0.14	0.14	0.14	0.14
Feed (purchase feed, fertiliser, seed, pesticides)	0.47	0.46	0.40	0.37	0.36	0.41
Machinery (maintenance, depreciation, contractor)	0.98	0.82	0.73	0.73	0.71	0.79
Fuel, energy, lubricants, water	0.33	0.37	0.22	0.17	0.22	0.26
Vet & medicine	0.13	0.12	0.11	0.10	0.09	0.11
Other inputs cow calf enterprise	0.18	0.17	0.16	0.16	0.15	0.16
Labour						
Paid Labour	-	-	-	-	-	-
Unpaid Labour	0.71	0.69	0.65	0.65	0.63	0.67
Total Variable Costs	2.9	2.8	2.4	2.3	2.3	2.5
CAPITAL COSTS						
Insurance, taxes	0.16	0.16	0.15	0.15	0.14	0.15
Buildings (maintenance, depreciation)	0.39	0.35	0.33	0.33	0.32	0.35
Land Cost						
Rented Land	0.18	0.18	0.18	0.18	0.18	0.18
Owned Land	0.51	0.49	0.48	0.47	0.46	0.48
Capital Costs						
Liabilities	0.09	0.12	0.13	0.11	0.10	0.11
Own capital	0.28	0.27	0.27	0.27	0.27	0.27
Total Capital Costs	1.6	1.6	1.5	1.5	1.5	1.5
COSTS						
Cash Costs	1.93	1.94	1.69	1.57	1.56	1.74
Depreciation Costs	1.13	0.95	0.86	0.87	0.84	0.93
Opportunity Costs	1.49	1.45	1.41	1.39	1.36	1.42
Total Production Costs	4.55	4.34	3.96	3.83	3.76	4.09
Profits						
Short-term profit (cash costs)	2.03	0.75	0.44	0.84	0.88	0.99
Medium-term profit (cash + depreciation)	0.91	(0.20)	(0.43)	(0.03)	0.04	0.06
Long-term profit (cash + depreciation + opportunity)	(0.58)	(1.65)	(1.84)	(1.42)	(1.32)	(1.36)

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