

Farm Characteristics	CA-BC-4
Farm Description	A cow-calf operation with 230 cows located one hour from Williams Lake with 100 acres of irrigated alfalfa and 150 acres of dry land grass mix, utilizing homegrown and purchased feed.
Winter Feeding Ration (lbs/cow/day as fed)	167 days on hay and oat greenfeed (34 lb).
Retained Ownership/Replacement Ration (lb/head/day as fed)	Replacement heifers: 167 days on hay and oat greenfeed (25 lb).

Disclaimer: This benchmark is based on the report Cost and Returns of Sample Ranching Businesses in Various Areas of British Columbia -2024.

Environment	
Average Annual Temperature	5 °C
Average Annual Precipitation (mm)	42 mm
Ecoregion	Williams Lake
Stocking Rate (Animal Unit days per acre)	23
Fertilize Hay (yes/no)	Yes
Fertilize Pasture (yes/no)	N/A
Typical Hay Yield (tonnes/acre)	2.4
Grassland Acres (owned+rented)	950
Crop Acres (includes hay) (owned+rented)	250
Bush and other acres	N/A

Physical Performance Indicators	
Breed	N/A
Cow:Bull Ratio	20
Bull Culling Rate (%)	33%
Mature Cow Weight (lb)	1,350
Heifer Retention for a steady herd (%)	13%
Cow Death Loss (%)	1.7%
Cow Culling Rate (%)	11.3%
Calves alive after 24hr/100 Cows exposed	87
Calf Death Loss (%) 24 hr to weaning	15%
Calves weaned per 100 cows exposed	74
Total Liveweight Sold per Cow (lb)	512
Weaning Weight (lb)	525
205 day adjusted Weaning Weight (lb)	586
Average Daily Gain pre-weaning (lb)	2.44
Weaning Weight as % of Cow Weight	39%

Production System	
Herd size	230
Days on field feeding (e.g. swath grazing)	0
Days supplemented on pasture	0
Days on full winter feed	167
Calving Start date	April 01
Weaning date	October 12
Sale date	October 12
Retained ownership	Replacements
% of feed purchased	2.5%
% of land in crops	21%
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)

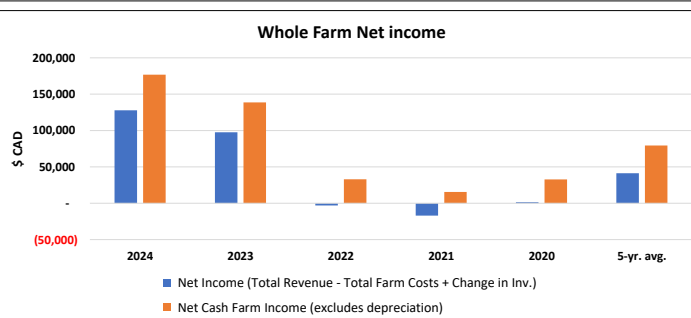
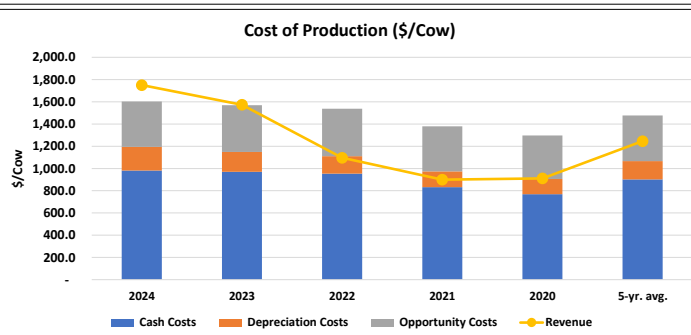
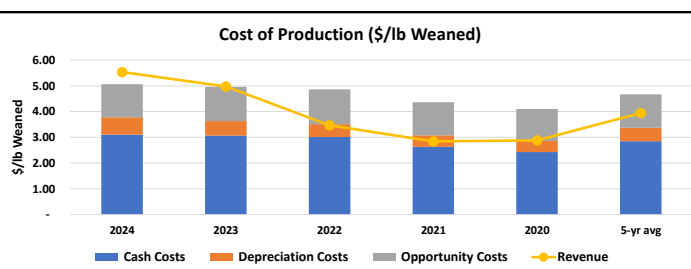
Depreciation = Linear depreciation on machinery and buildings, calculated on replacement values

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 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)

Revenue = sales of calves, cull cows, breeding stock, government payments and other revenue applicable to the specific enterprise



Whole Farm Overview Page

Overview							
Operation Maturity	N/A						
Herd Size	230						
Paid Labour (livestock only) (hours)	600			Beef Animals Sold from Retained Ownership	N/A		
Unpaid Labour (livestock only) (hours)	2,752						
Average wages - paid and unpaid (\$/hr)	25.00						
Revenue		2024	2023	2022	2021	2020	5-yr. avg.
Market Revenue	5-yr avg	402,582	361,934	252,277	206,866	209,544	286,640
Cow-Calf	100%	402,582	361,934	252,277	206,866	209,544	286,640
Cash Crops	0%	-	-	-	-	-	-
Retained Ownership	0%	-	-	-	-	-	-
Government Payments	0%	-	-	-	-	-	-
Other Farm Revenue †	0%	12	6	-	-	-	4
Total Revenue	100%	402,594	361,941	252,277	206,866	209,544	286,644
Change in Inventory		-	-	-	-	-	-
Expenses		2024	2023	2022	2021	2020	5-yr. avg.
Depreciation		48,975	41,061	36,073	32,588	31,453	38,030
Machinery		43,850	36,211	31,481	28,295	27,320	33,431
Buildings		5,125	4,851	4,592	4,294	4,134	4,599
Quota econ. Accounting		-	-	-	-	-	-
Overhead costs		86,946	91,399	93,678	77,709	68,940	83,734
Land improvement		-	-	-	-	-	-
Machinery Maintenance		14,809	13,566	13,744	13,532	13,176	13,765
Buildings Maintenance		7,500	7,241	6,880	6,227	5,940	6,758
Contract labour		-	-	-	-	-	-
Diesel, Gasoline, Natural Gas		26,237	28,625	33,237	22,174	16,046	25,264
Electricity		5,000	7,931	5,487	3,329	2,448	4,839
Water		-	-	-	-	-	-
Farm insurance		14,000	14,599	15,079	14,316	13,810	14,361
Disability and accident insurance		-	-	-	-	-	-
Farm taxes and duties		2,400	2,503	2,585	2,454	2,367	2,462
Advisor costs		-	-	-	-	-	-
Accountant & legal fees		5,000	5,214	5,385	5,113	4,932	5,129
Phone & utilities		4,000	3,907	3,760	3,521	3,407	3,719
Other overhead costs		8,000	7,813	7,520	7,043	6,814	7,438
Wages, rent and interest payments		41,163	39,196	36,937	33,937	31,477	36,542
Paid Labour		15,000	15,641	16,156	15,339	14,796	15,386
Total land rents		-	-	-	-	-	-
Total interest on debt		26,163	23,554	20,781	18,598	16,680	21,155
Cow-Calf		63,424	58,029	52,304	47,504	46,403	53,533
Animal purchases		32,000	26,638	21,037	18,405	19,080	23,432
Purchased feed		9,273	8,899	8,504	7,600	6,553	8,166
Other fixed and var. costs *		22,151	22,492	22,764	21,498	20,770	21,935
Retained Ownership		-	-	-	-	-	-
Animal purchases		-	-	-	-	-	-
Purchased feed		-	-	-	-	-	-
Other fixed and var. costs *		-	-	-	-	-	-
Crop and forage		34,307	34,559	36,392	32,187	29,962	33,481
Seed		4,980	4,963	4,694	4,468	4,307	4,682
Fertilizer		20,252	20,527	22,847	19,222	17,329	20,035
Herbicide		-	-	-	-	-	-
Fungicide & Insecticide		-	-	-	-	-	-
Irrigation		-	-	-	-	-	-
Contract labour		3,125	3,259	3,259	3,259	3,259	3,232
Fuel costs (crop & forage)		-	-	-	-	-	-
Other crop and forage		5,950	5,811	5,593	5,238	5,068	5,532
Total Farm Costs (excludes unpaid labour)		274,816	264,244	255,384	223,925	208,235	245,321
Cash Costs (Total Farm Costs - Depreciation)		225,841	223,183	219,311	191,336	176,782	207,291
Depreciation & Opportunity Costs (including unpaid labour)		117,775	109,861	104,873	101,388	100,253	106,830
Total Economic Costs (cash, depr, opportunity)		343,616	333,044	324,184	292,725	277,035	314,121
Profits		2024	2023	2022	2021	2020	5-yr. avg.
Net Income (Total Revenue - Total Farm Costs + Change in Inv.)		127,778	97,696	(3,107)	(17,059)	1,309	41,323
Net Cash Farm Income (excludes depreciation)		176,741	138,751	32,966	15,529	32,762	79,350

† 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*	230	230	230	230	230	230
Average male and female calf price (\$/head)	2,202	2,020	1,372	1,111	1,130	1,567
REVENUE						
Cow Calf	1,750	1,574	1,097	899	911	1,246
Cull animals and slaughter receipts	410	346	259	220	223	291
Breeding livestock receipts	-	-	-	-	-	-
Calf Sales and transfer to retained ownership enterprise	1,340	1,228	838	679	688	955
Government payments	-	-	-	-	-	-
Other returns	-	-	-	-	-	-
Total Cow-Calf Revenue	1,750	1,574	1,097	899	911	1,246
VARIABLE COSTS						
Animal purchases	139.1	115.8	91.5	80.0	83.0	102
Feed (purchase feed, fertiliser, seed, pesticides)	175.9	174.8	181.0	158.8	144.6	167
Machinery (maintenance, depreciation, contractor)	268.6	230.6	210.8	196.0	190.2	219
Fuel, energy, lubricants, water	135.8	158.9	168.4	110.9	80.4	131
Vet & medicine	34.8	36.3	37.5	35.6	34.3	36
Other inputs cow calf enterprise	135.4	135.1	134.0	126.1	121.9	130
Labour						
Paid Labour	65.2	68.0	70.2	66.7	64.3	67
Unpaid Labour	299.1	311.9	322.2	305.9	295.1	307
Total Variable Costs	1,254.0	1,231.5	1,215.5	1,079.9	1,013.8	1,159
CAPITAL COSTS						
Insurance, taxes	71.3	74.4	76.8	72.9	70.3	73
Buildings (maintenance, depreciation)	54.9	52.6	49.9	45.7	43.8	49
Land Cost	-	-	-	-	-	-
Rented Land	-	-	-	-	-	-
Own Land	31.5	29.5	28.7	28.1	27.0	29
Capital Costs	-	-	-	-	-	-
Liabilities	113.7	102.4	90.4	80.9	72.5	92
Own capital	76.6	78.9	76.8	72.3	70.2	75
Total Capital Costs	348.1	337.7	322.6	300.0	283.8	318
COSTS						
Cash Costs	981.9	970.4	953.5	831.9	768.6	901
Depreciation Costs	212.9	178.5	156.8	141.7	136.8	165
Opportunity Costs	407.3	420.3	427.7	406.4	392.2	411
Total Production Costs	1,602.1	1,569.2	1,538.1	1,379.9	1,297.6	1,477
Profits	2024	2023	2022	2021	2020	5-yr. avg.
Short-term profit (cash costs)	768.4	603.3	143.3	67.5	142.4	345
Medium-term profit (cash + depreciation)	555.5	424.7	(13.5)	(74.2)	5.7	180
Long-term profit (cash + depreciation + opportunity)	148.2	4.4	(441.2)	(480.5)	(386.5)	(231)

*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\$.

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.

Capital: The opportunity cost of capital is the interest rate for long-term government bonds multiplied by the equity without land (values of machines, buildings, livestock, circulating capital, less total loans). If the producers' return on capital through farm and ranch production of an enterprise is greater than investing elsewhere then, continuous production should be preferred.

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	72,749	72,749	72,749	72,749	72,749	72,749
Average male and female weaning weight (lbs)	525	525	525	525	525	525
Average male and female calf price at weaning (\$/lb)	4.19	3.85	2.61	2.12	2.15	2.99
REVENUE						
Cow Calf Operation	5.53	4.98	3.47	2.84	2.88	3.94
Cull animals and slaughter receipts	1.30	1.09	0.82	0.70	0.70	0.92
Breeding livestock receipts	-	-	-	-	-	-
Calf Sales and transfer to retained ownership enterprise	4.24	3.88	2.65	2.15	2.18	3.02
Government payments	-	-	-	-	-	-
Other returns	-	-	-	-	-	-
Total Cow-Calf Revenue	5.53	4.98	3.47	2.84	2.88	3.94
VARIABLE COSTS						
Animal purchases	0.44	0.37	0.29	0.25	0.26	0.32
Feed (purchase feed, fertiliser, seed, pesticides)	0.56	0.55	0.57	0.50	0.46	0.53
Machinery (maintenance, depreciation, contractor)	0.85	0.73	0.67	0.62	0.60	0.69
Fuel, energy, lubricants, water	0.43	0.50	0.53	0.35	0.25	0.41
Vet & medicine	0.11	0.11	0.12	0.11	0.11	0.11
Other inputs cow calf enterprise	0.43	0.43	0.42	0.40	0.39	0.41
Labour						
Paid Labour	0.21	0.22	0.22	0.21	0.20	0.21
Unpaid Labour	0.95	0.99	1.02	0.97	0.93	0.97
Total Variable Costs	4.0	3.9	3.8	3.4	3.2	3.7
CAPITAL COSTS						
Insurance, taxes	0.23	0.24	0.24	0.23	0.22	0.23
Buildings (maintenance, depreciation)	0.17	0.17	0.16	0.14	0.14	0.16
Land Cost						
Rented Land	-	-	-	-	-	-
Owned Land	0.10	0.09	0.09	0.09	0.09	0.09
Capital Costs						
Liabilities	0.36	0.32	0.29	0.26	0.23	0.29
Own capital	0.24	0.25	0.24	0.23	0.22	0.24
Total Capital Costs	1.1	1.1	1.0	0.9	0.9	1.0
COSTS						
Cash Costs	3.10	3.07	3.01	2.63	2.43	2.85
Depreciation Costs	0.67	0.56	0.50	0.45	0.43	0.52
Opportunity Costs	1.29	1.33	1.35	1.28	1.24	1.30
Total Production Costs	5.07	4.96	4.86	4.36	4.10	4.67
Profits	2024	2023	2022	2021	2020	5-yr. avg.
Short-term profit (cash costs)	2.43	1.91	0.45	0.21	0.45	1.09
Medium-term profit (cash + depreciation)	1.76	1.34	(0.04)	(0.23)	0.02	0.57
Long-term profit (cash + depreciation + opportunity)	0.47	0.01	(1.39)	(1.52)	(1.22)	(0.73)

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