

Farm Characteristics

CA-BC-3

Farm Description	A cow-calf operation with 460 cows located near Kamloops, utilizing predominantly homegrown feed and selling surplus hay.
Winter Feeding Ration (lbs/cow/day as fed)	135 days on hay and barley greenfeed (33 lb).
Retained Ownership/Replacement Ration (lb/head/day as fed)	Replacement heifers: 135 days on hay and barley greenfeed (20 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	8.6°C
Average Annual Precipitation (mm)	269.4 mm
Ecoregion	Kamloops
Stocking Rate (Animal Unit days per acre)	14
Fertilize Hay (yes/no)	Yes
Fertilize Pasture (yes/no)	N/A
Typical Hay Yield (tonnes/acre)	3.4
Grassland Acres (owned+rented)	1,700
Crop Acres (includes hay) (owned+rented)	300
Bush and other acres	N/A

Physical Performance Indicators	
Breed	N/A
Cow:Bull Ratio	20
Bull Culling Rate (%)	33%
Mature Cow Weight (lb)	1,300
Heifer Retention for a steady herd (%)	13%
Cow Death Loss (%)	1.3%
Cow Culling Rate (%)	11.7%
Calves alive after 24hr/100 Cows exposed	87
Calf Death Loss (%) 24 hr to weaning	8%
Calves weaned per 100 cows exposed	80
Total Liveweight Sold per Cow (lb)	561
Weaning Weight (lb)	540
205 day adjusted Weaning Weight (lb)	586
Average Daily Gain pre-weaning (lb)	2.45
Weaning Weight as % of Cow Weight	42%

Production System	
Herd size	460
Days on field feeding (e.g. swath grazing)	0
Days supplemented on pasture	0
Days on full winter feed	135
Calving Start date	March 25
Weaning date	October 15
Sale date	October 15
Retained ownership	Replacements
% of feed purchased	0.5%
% 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)

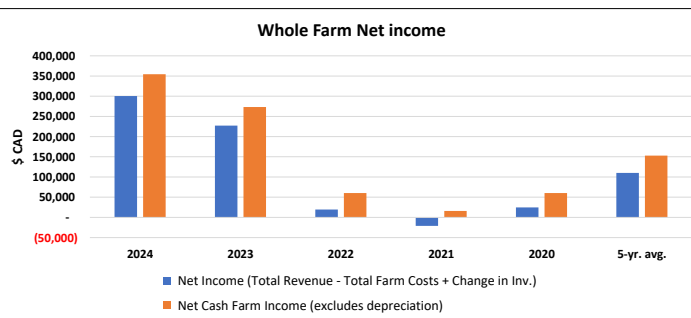
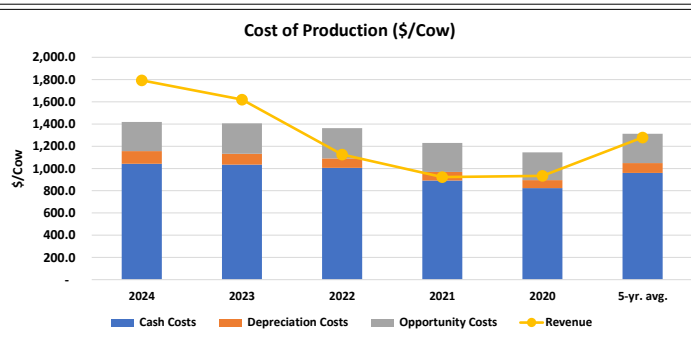
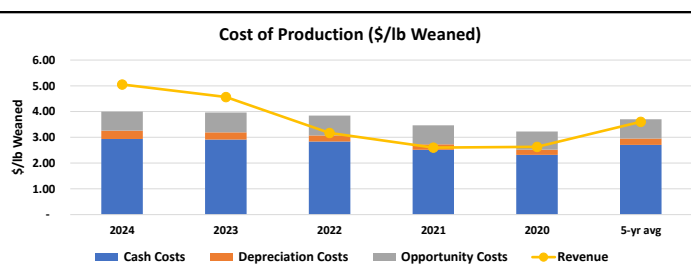
Depreciation = Linear depreciation on machinery and buildings, calculated on replacement values

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 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	460						
Paid Labour (livestock only) (hours)	3,108			Beef Animals Sold from Retained Ownership	N/A		
Unpaid Labour (livestock only) (hours)	3,130						
Average wages - paid and unpaid (\$/hr)	25.00						
Revenue		2024	2023	2022	2021	2020	5-yr. avg.
Market Revenue	5-yr avg	848,968	763,340	543,714	443,487	459,353	611,772
Cow-Calf	96%	824,652	744,924	517,959	424,495	429,714	588,349
Cash Crops	4%	24,316	18,416	25,754	18,992	29,639	23,423
Retained Ownership	0%	-	-	-	-	-	-
Government Payments	0%	-	-	-	-	-	-
Other Farm Revenue †	0%	22	10	-	-	-	6
Total Revenue	100%	848,989	763,350	543,714	443,487	459,353	611,778
Change in Inventory		-	-	-	-	-	-
Expenses		2024	2023	2022	2021	2020	5-yr. avg.
Depreciation		54,275	45,951	40,635	36,827	35,535	42,644
Machinery		44,900	37,078	32,235	28,972	27,974	34,232
Buildings		9,375	8,873	8,400	7,855	7,561	8,413
Quota econ. Accounting		-	-	-	-	-	-
Overhead costs		135,543	142,120	145,991	120,738	106,771	130,233
Land improvement		-	-	-	-	-	-
Machinery Maintenance		30,125	27,597	27,959	27,527	26,802	28,002
Buildings Maintenance		13,000	12,551	11,926	10,794	10,296	11,713
Contract labour		-	-	-	-	-	-
Diesel, Gasoline, Natural Gas		42,418	46,279	53,735	35,849	25,943	40,845
Electricity		8,000	12,690	8,779	5,327	3,917	7,743
Water		-	-	-	-	-	-
Farm insurance		20,000	20,855	21,541	20,451	19,729	20,515
Disability and accident insurance		-	-	-	-	-	-
Farm taxes and duties		5,000	5,214	5,385	5,113	4,932	5,129
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		133,085	131,092	127,935	119,234	112,727	124,815
Paid Labour		80,000	83,421	86,165	81,806	78,915	82,061
Total land rents		-	-	-	-	-	-
Total interest on debt		53,085	47,671	41,770	37,429	33,813	42,753
Cow-Calf		153,685	143,494	131,611	118,725	115,579	132,619
Animal purchases		64,000	53,276	42,074	36,811	38,159	46,864
Purchased feed		12,000	11,847	10,619	8,947	7,723	10,227
Other fixed and var. costs *		77,685	78,371	78,919	72,966	69,696	75,527
Retained Ownership		-	-	-	-	-	-
Animal purchases		-	-	-	-	-	-
Purchased feed		-	-	-	-	-	-
Other fixed and var. costs *		-	-	-	-	-	-
Crop and forage		72,140	73,374	78,104	68,820	63,986	71,285
Seed		6,000	5,979	5,655	5,383	5,189	5,641
Fertilizer		43,500	44,090	49,073	41,288	37,221	43,034
Herbicide		1,820	2,614	3,250	2,944	2,811	2,688
Fungicide & Insecticide		-	-	-	-	-	-
Irrigation		-	-	-	-	-	-
Contract labour		5,400	5,631	5,631	5,631	5,631	5,585
Fuel costs (crop & forage)		-	-	-	-	-	-
Other crop and forage		15,420	15,061	14,495	13,575	13,134	14,337
Total Farm Costs (excludes unpaid labour)		548,728	536,032	524,276	464,343	434,598	501,595
Cash Costs (Total Farm Costs - Depreciation)		494,453	490,081	483,642	427,517	399,063	458,951
Depreciation & Opportunity Costs (including unpaid labour)		132,537	124,213	118,896	115,088	113,797	120,906
Total Economic Costs (cash, depr, opportunity)		626,990	614,294	602,538	542,605	512,860	579,857
Profits		2024	2023	2022	2021	2020	5-yr. avg.
Net Income (Total Revenue - Total Farm Costs + Change in Inv.)		300,261	227,318	19,437	(20,857)	24,755	110,183
Net Cash Farm Income (excludes depreciation)		354,515	273,259	60,072	15,970	60,290	152,821

† 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*	460	460	460	460	460	460
Average male and female calf price (\$/head)	2,114	1,939	1,318	1,068	1,085	1,505
REVENUE						
Cow Calf	1,793	1,619	1,126	923	934	1,279
Cull animals and slaughter receipts	387	332	247	210	212	278
Breeding livestock receipts	-	-	-	-	-	-
Calf Sales and transfer to retained ownership enterprise	1,406	1,288	879	712	722	1,001
Government payments	-	-	-	-	-	-
Other returns	-	-	-	-	-	-
Total Cow-Calf Revenue	1,793	1,619	1,126	923	934	1,279
VARIABLE COSTS						
Animal purchases	139.1	115.8	91.5	80.0	83.0	102
Feed (purchase feed, fertiliser, seed, pesticides)	157.2	158.8	165.4	143.6	131.4	151
Machinery (maintenance, depreciation, contractor)	169.0	148.3	135.7	128.6	122.5	141
Fuel, energy, lubricants, water	106.5	125.1	129.5	85.7	60.7	101
Vet & medicine	34.8	36.3	37.5	35.6	34.3	36
Other inputs cow calf enterprise	170.0	170.0	168.6	155.7	148.0	162
Labour						
Paid Labour	168.9	177.0	178.4	170.2	160.5	171
Unpaid Labour	172.4	180.6	182.1	173.7	163.8	175
Total Variable Costs	1,117.9	1,111.9	1,088.7	973.1	904.1	1,039
CAPITAL COSTS						
Insurance, taxes	52.1	54.5	55.2	52.6	49.8	53
Buildings (maintenance, depreciation)	47.2	45.5	42.1	38.8	36.3	42
Land Cost	-	-	-	-	-	-
Rented Land	-	-	-	-	-	-
Own Land	43.9	41.3	40.0	39.4	38.2	41
Capital Costs	-	-	-	-	-	-
Liabilities	112.1	101.1	86.5	77.9	68.8	89
Own capital	45.9	51.7	50.8	48.5	47.7	49
Total Capital Costs	301.2	294.0	274.6	257.2	240.8	274
COSTS						
Cash Costs	1,042.3	1,034.9	1,006.2	892.0	823.0	960
Depreciation Costs	114.6	97.5	84.2	76.6	72.3	89
Opportunity Costs	262.2	273.6	272.9	261.6	249.7	264
Total Production Costs	1,419.1	1,405.9	1,363.3	1,230.3	1,145.0	1,313
Profits	2024	2023	2022	2021	2020	5-yr. avg.
Short-term profit (cash costs)	750.4	584.5	119.8	30.8	111.2	319
Medium-term profit (cash + depreciation)	635.8	487.1	35.6	(45.8)	38.9	230
Long-term profit (cash + depreciation + opportunity)	373.6	213.5	(237.3)	(307.5)	(210.8)	(34)

*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	163,219	163,219	163,219	163,219	163,219	163,219
Average male and female weaning weight (lbs)	540	540	540	540	540	540
Average male and female calf price at weaning (\$/lb)	3.91	3.59	2.44	1.98	2.01	2.79
REVENUE						
Cow Calf Operation	5.05	4.56	3.17	2.60	2.63	3.60
Cull animals and slaughter receipts	1.09	0.93	0.70	0.59	0.60	0.78
Breeding livestock receipts	-	-	-	-	-	-
Calf Sales and transfer to retained ownership enterprise	3.96	3.63	2.48	2.01	2.03	2.82
Government payments	-	-	-	-	-	-
Other returns	-	-	-	-	-	-
Total Cow-Calf Revenue	5.05	4.56	3.17	2.60	2.63	3.60
VARIABLE COSTS						
Animal purchases	0.39	0.33	0.26	0.23	0.23	0.29
Feed (purchase feed, fertiliser, seed, pesticides)	0.44	0.45	0.47	0.40	0.37	0.43
Machinery (maintenance, depreciation, contractor)	0.48	0.42	0.38	0.36	0.35	0.40
Fuel, energy, lubricants, water	0.30	0.35	0.36	0.24	0.17	0.29
Vet & medicine	0.10	0.10	0.11	0.10	0.10	0.10
Other inputs cow calf enterprise	0.48	0.48	0.48	0.44	0.42	0.46
Labour						
Paid Labour	0.48	0.50	0.50	0.48	0.45	0.48
Unpaid Labour	0.49	0.51	0.51	0.49	0.46	0.49
Total Variable Costs	3.2	3.1	3.1	2.7	2.5	2.9
CAPITAL COSTS						
Insurance, taxes	0.15	0.15	0.16	0.15	0.14	0.15
Buildings (maintenance, depreciation)	0.13	0.13	0.12	0.11	0.10	0.12
Land Cost						
Rented Land	-	-	-	-	-	-
Owned Land	0.12	0.12	0.11	0.11	0.11	0.11
Capital Costs						
Liabilities	0.32	0.29	0.24	0.22	0.19	0.25
Own capital	0.13	0.15	0.14	0.14	0.13	0.14
Total Capital Costs	0.8	0.8	0.8	0.7	0.7	0.8
COSTS						
Cash Costs	2.94	2.92	2.84	2.51	2.32	2.70
Depreciation Costs	0.32	0.27	0.24	0.22	0.20	0.25
Opportunity Costs	0.74	0.77	0.77	0.74	0.70	0.74
Total Production Costs	4.00	3.96	3.84	3.47	3.23	3.70
Profits	2024	2023	2022	2021	2020	5-yr. avg.
Short-term profit (cash costs)	2.11	1.65	0.34	0.09	0.31	0.90
Medium-term profit (cash + depreciation)	1.79	1.37	0.10	(0.13)	0.11	0.65
Long-term profit (cash + depreciation + opportunity)	1.05	0.60	(0.67)	(0.87)	(0.59)	(0.09)

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