

Farm Characteristics	CA-BC-2
Farm Description	A cow-calf operation with 174 cows located near Vernon, utilizing predominantly homegrown feed and selling surplus hay.
Winter Feeding Ration (lbs/cow/day as fed)	181 days on hay and oat greenfeed (33 lb).
Retained Ownership/Replacement Ration (lb/head/day as fed)	Replacement heifers: 181 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	7.4°C
Average Annual Precipitation (mm)	428.1 mm
Ecoregion	Vernon
Stocking Rate (Animal Unit days per acre)	57
Fertilize Hay (yes/no)	Yes
Fertilize Pasture (yes/no)	N/A
Typical Hay Yield (tonnes/acre)	3.6
Grassland Acres (owned+rented)	150
Crop Acres (includes hay) (owned+rented)	150
Bush and other acres	N/A

Physical Performance Indicators	
Breed	N/A
Cow:Bull Ratio	25
Bull Culling Rate (%)	29%
Mature Cow Weight (lb)	1,400
Heifer Retention for a steady herd (%)	14%
Cow Death Loss (%)	3.4%
Cow Culling Rate (%)	10.3%
Calves alive after 24hr/100 Cows exposed	86
Calf Death Loss (%) 24 hr to weaning	9%
Calves weaned per 100 cows exposed	78
Total Liveweight Sold per Cow (lb)	584
Weaning Weight (lb)	625
205 day adjusted Weaning Weight (lb)	516
Average Daily Gain pre-weaning (lb)	2.10
Weaning Weight as % of Cow Weight	45%

Production System	
Herd size	174
Days on field feeding (e.g. swath grazing)	0
Days supplemented on pasture	0
Days on full winter feed	181
Calving Start date	February 15
Weaning date	October 15
Sale date	October 15
Retained ownership	Replacements
% of feed purchased	1.1%
% of land in crops	50%
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)

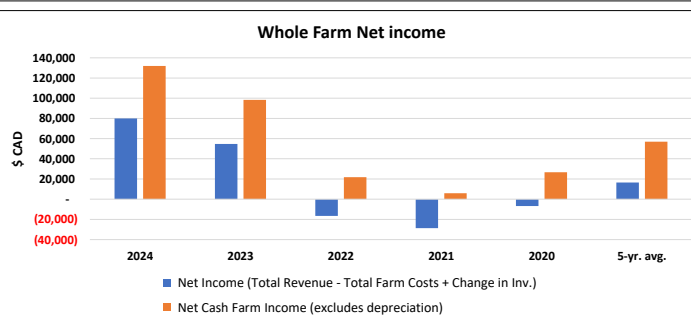
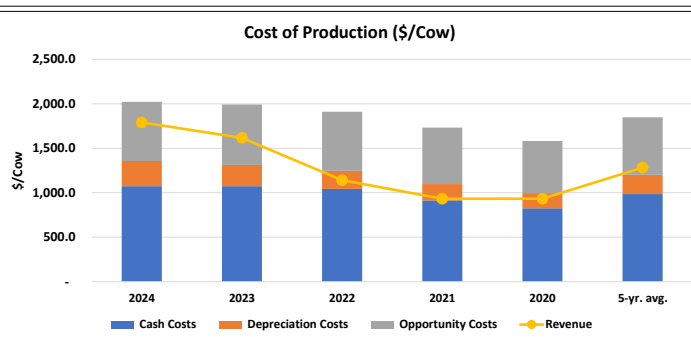
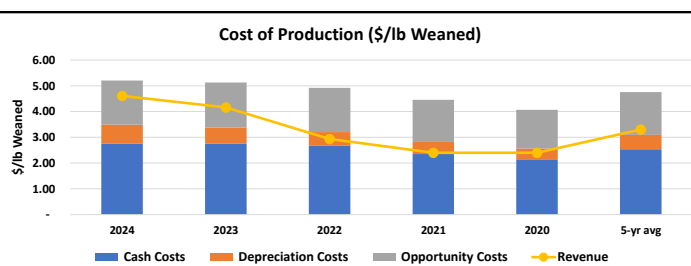
Depreciation = Linear depreciation on machinery and buildings, calculated on replacement values

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	174		Beef Animals Sold from Retained Ownership	N/A			
Paid Labour (livestock only) (hours)	247						
Unpaid Labour (livestock only) (hours)	2,929						
Average wages - paid and unpaid (\$/hr)	25.00						
Revenue		2024	2023	2022	2021	2020	5-yr. avg.
Market Revenue	5-yr avg	328,276	293,944	216,258	175,361	182,638	239,295
Cow-Calf	93%	311,616	281,326	198,612	162,348	162,331	223,247
Cash Crops	7%	16,660	12,618	17,646	13,013	20,307	16,049
Retained Ownership	0%	-	-	-	-	-	-
Government Payments	0%	-	-	-	-	-	-
Other Farm Revenue †	0%	6	2	-	-	-	2
Total Revenue	100%	328,282	293,946	216,258	175,361	182,638	239,297
Change in Inventory		-	-	-	-	-	-
Expenses		2024	2023	2022	2021	2020	5-yr. avg.
Depreciation		52,025	43,640	38,352	34,653	33,445	40,423
Machinery		46,400	38,317	33,312	29,940	28,908	35,375
Buildings		5,625	5,324	5,040	4,713	4,537	5,048
Quota econ. Accounting		-	-	-	-	-	-
Overhead costs		71,729	74,913	76,849	63,901	56,733	68,825
Land improvement		-	-	-	-	-	-
Machinery Maintenance		16,211	14,851	15,046	14,813	14,423	15,069
Buildings Maintenance		7,500	7,241	6,880	6,227	5,940	6,758
Contract labour		-	-	-	-	-	-
Diesel, Gasoline, Natural Gas		21,518	23,477	27,259	18,186	13,160	20,720
Electricity		4,000	6,345	4,390	2,663	1,958	3,871
Water		-	-	-	-	-	-
Farm insurance		10,000	10,428	10,771	10,226	9,864	10,258
Disability and accident insurance		-	-	-	-	-	-
Farm taxes and duties		2,500	2,607	2,693	2,556	2,466	2,564
Advisor costs		-	-	-	-	-	-
Accountant & legal fees		3,000	3,128	3,231	3,068	2,959	3,077
Phone & utilities		4,000	3,907	3,760	3,521	3,407	3,719
Other overhead costs		3,000	2,930	2,820	2,641	2,555	2,789
Wages, rent and interest payments		27,101	25,141	22,738	20,723	19,119	22,964
Paid Labour		6,500	6,778	7,001	6,647	6,412	6,667
Total land rents		-	-	-	-	-	-
Total interest on debt		20,601	18,363	15,737	14,077	12,707	16,297
Cow-Calf		58,533	56,055	53,095	47,728	45,485	52,179
Animal purchases		20,000	16,649	13,148	11,503	11,925	14,645
Purchased feed		7,650	7,503	6,835	6,287	5,457	6,746
Other fixed and var. costs *		30,883	31,904	33,112	29,938	28,104	30,788
Retained Ownership		-	-	-	-	-	-
Animal purchases		-	-	-	-	-	-
Purchased feed		-	-	-	-	-	-
Other fixed and var. costs *		-	-	-	-	-	-
Crop and forage		38,971	39,543	41,755	37,088	34,647	38,401
Seed		3,923	3,910	3,698	3,520	3,393	3,688
Fertilizer		21,750	22,045	24,537	20,644	18,611	21,517
Herbicide		660	948	1,179	1,067	1,020	975
Fungicide & Insecticide		-	-	-	-	-	-
Irrigation		-	-	-	-	-	-
Contract labour		4,500	4,692	4,692	4,692	4,692	4,654
Fuel costs (crop & forage)		-	-	-	-	-	-
Other crop and forage		8,138	7,948	7,650	7,164	6,931	7,566
Total Farm Costs (excludes unpaid labour)		248,359	239,293	232,789	204,093	189,429	222,793
Cash Costs (Total Farm Costs - Depreciation)		196,334	195,652	194,437	169,441	155,984	182,370
Depreciation & Opportunity Costs (including unpaid labour)		125,257	116,872	111,583	107,885	106,677	113,655
Total Economic Costs (cash, depr, opportunity)		321,591	312,525	306,021	277,325	262,661	296,024
Profits		2024	2023	2022	2021	2020	5-yr. avg.
Net Income (Total Revenue - Total Farm Costs + Change in Inv.)		79,923	54,654	(16,531)	(28,733)	(6,790)	16,504
Net Cash Farm Income (excludes depreciation)		131,942	98,292	21,821	5,920	26,655	56,926

† 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*	174	174	174	174	174	174
Average male and female calf price (\$/head)	2,251	2,057	1,430	1,155	1,158	1,610
REVENUE						
Cow Calf	1,791	1,617	1,141	933	933	1,283
Cull animals and slaughter receipts	361	311	231	196	198	260
Breeding livestock receipts	-	-	-	-	-	-
Calf Sales and transfer to retained ownership enterprise	1,429	1,306	911	737	735	1,023
Government payments	-	-	-	-	-	-
Other returns	-	-	-	-	-	-
Total Cow-Calf Revenue	1,791	1,617	1,141	933	933	1,283
VARIABLE COSTS						
Animal purchases	114.9	95.7	75.6	66.1	68.5	84
Feed (purchase feed, fertiliser, seed, pesticides)	219.6	220.7	228.1	201.2	184.0	211
Machinery (maintenance, depreciation, contractor)	364.5	316.4	279.2	262.0	245.3	293
Fuel, energy, lubricants, water	139.2	164.0	167.0	110.9	77.2	132
Vet & medicine	69.0	71.9	74.3	70.5	68.0	71
Other inputs cow calf enterprise	163.1	166.3	167.8	150.6	139.1	157
Labour						
Paid Labour	35.5	37.3	37.0	35.4	32.8	36
Unpaid Labour	430.6	452.7	448.7	429.4	397.7	432
Total Variable Costs	1,536.4	1,524.9	1,477.6	1,326.2	1,212.5	1,416
CAPITAL COSTS						
Insurance, taxes	67.3	70.6	70.6	67.4	63.0	68
Buildings (maintenance, depreciation)	71.6	69.1	62.9	58.2	53.5	63
Land Cost	-	-	-	-	-	-
Rented Land	-	-	-	-	-	-
Own Land	129.9	119.6	119.4	114.1	104.1	117
Capital Costs	-	-	-	-	-	-
Liabilities	112.4	101.0	83.1	74.9	64.9	87
Own capital	104.3	106.8	97.8	91.1	83.4	97
Total Capital Costs	485.5	467.2	433.7	405.7	368.9	432
COSTS						
Cash Costs	1,073.2	1,072.9	1,043.1	913.0	825.4	986
Depreciation Costs	283.8	240.0	202.4	184.4	170.8	216
Opportunity Costs	664.8	679.1	665.8	634.6	585.2	646
Total Production Costs	2,021.8	1,992.1	1,911.3	1,731.9	1,581.4	1,848
Profits	2024	2023	2022	2021	2020	5-yr. avg.
Short-term profit (cash costs)	717.6	543.9	98.4	20.1	107.5	298
Medium-term profit (cash + depreciation)	433.8	303.8	(104.0)	(164.3)	(63.3)	81
Long-term profit (cash + depreciation + opportunity)	(230.9)	(375.3)	(769.9)	(798.9)	(648.5)	(565)

*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	67,599	67,599	67,599	67,599	67,599	67,599
Average male and female weaning weight (lbs)	625	625	625	625	625	625
Average male and female calf price at weaning (\$/lb)	3.60	3.29	2.29	1.85	1.85	2.58
REVENUE						
Cow Calf Operation	4.61	4.16	2.94	2.40	2.40	3.30
Cull animals and slaughter receipts	0.93	0.80	0.59	0.51	0.51	0.67
Breeding livestock receipts	-	-	-	-	-	-
Calf Sales and transfer to retained ownership enterprise	3.68	3.36	2.34	1.90	1.89	2.63
Government payments	-	-	-	-	-	-
Other returns	-	-	-	-	-	-
Total Cow-Calf Revenue	4.61	4.16	2.94	2.40	2.40	3.30
VARIABLE COSTS						
Animal purchases	0.30	0.25	0.19	0.17	0.18	0.22
Feed (purchase feed, fertiliser, seed, pesticides)	0.57	0.57	0.59	0.52	0.47	0.54
Machinery (maintenance, depreciation, contractor)	0.94	0.81	0.72	0.67	0.63	0.76
Fuel, energy, lubricants, water	0.36	0.42	0.43	0.29	0.20	0.34
Vet & medicine	0.18	0.19	0.19	0.18	0.18	0.18
Other inputs cow calf enterprise	0.42	0.43	0.43	0.39	0.36	0.41
Labour						
Paid Labour	0.09	0.10	0.10	0.09	0.08	0.09
Unpaid Labour	1.11	1.17	1.15	1.11	1.02	1.11
Total Variable Costs	4.0	3.9	3.8	3.4	3.1	3.6
CAPITAL COSTS						
Insurance, taxes	0.17	0.18	0.18	0.17	0.16	0.17
Buildings (maintenance, depreciation)	0.18	0.18	0.16	0.15	0.14	0.16
Land Cost						
Rented Land	-	-	-	-	-	-
Owned Land	0.33	0.31	0.31	0.29	0.27	0.30
Capital Costs						
Liabilities	0.29	0.26	0.21	0.19	0.17	0.22
Own capital	0.27	0.28	0.25	0.23	0.21	0.25
Total Capital Costs	1.2	1.2	1.1	1.0	0.9	1.1
COSTS						
Cash Costs	2.76	2.76	2.68	2.35	2.12	2.54
Depreciation Costs	0.73	0.62	0.52	0.47	0.44	0.56
Opportunity Costs	1.71	1.75	1.71	1.63	1.51	1.66
Total Production Costs	5.20	5.13	4.92	4.46	4.07	4.76
Profits	2024	2023	2022	2021	2020	5-yr. avg.
Short-term profit (cash costs)	1.85	1.40	0.25	0.05	0.28	0.77
Medium-term profit (cash + depreciation)	1.12	0.78	(0.27)	(0.42)	(0.16)	0.21
Long-term profit (cash + depreciation + opportunity)	(0.59)	(0.97)	(1.98)	(2.06)	(1.67)	(1.45)

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