

Farm Characteristics

CA-BC-1

Farm Description	A cow-calf operation with 230 cows located near Cranbrook, utilizing predominantly homegrown feed and selling surplus hay.
Winter Feeding Ration (lbs/cow/day as fed)	171 days on hay and barley greenfeed (33 lb).
Retained Ownership/Replacement Ration (lb/head/day as fed)	Replacement heifers: 171 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	6.5°C
Average Annual Precipitation (mm)	384.4 mm
Ecoregion	Cranbrook
Stocking Rate (Animal Unit days per acre)	26
Fertilize Hay (yes/no)	Yes
Fertilize Pasture (yes/no)	N/A
Typical Hay Yield (tonnes/acre)	3.1
Grassland Acres (owned+rented)	500
Crop Acres (includes hay) (owned+rented)	200
Bush and other acres	N/A

Physical Performance Indicators	
Breed	N/A
Cow:Bull Ratio	25
Bull Culling Rate (%)	33%
Mature Cow Weight (lb)	1,200
Heifer Retention for a steady herd (%)	13%
Cow Death Loss (%)	1.7%
Cow Culling Rate (%)	11.3%
Calves alive after 24hr/100 Cows exposed	89
Calf Death Loss (%) 24 hr to weaning	10%
Calves weaned per 100 cows exposed	78
Total Liveweight Sold per Cow (lb)	526
Weaning Weight (lb)	543
205 day adjusted Weaning Weight (lb)	515
Average Daily Gain pre-weaning (lb)	2.10
Weaning Weight as % of Cow Weight	45%

Production System	
Herd size	230
Days on field feeding (e.g. swath grazing)	0
Days supplemented on pasture	0
Days on full winter feed	171
Calving Start date	March 10
Weaning date	November 01
Sale date	November 01
Retained ownership	Replacements
% of feed purchased	0.4%
% of land in crops	29%
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)

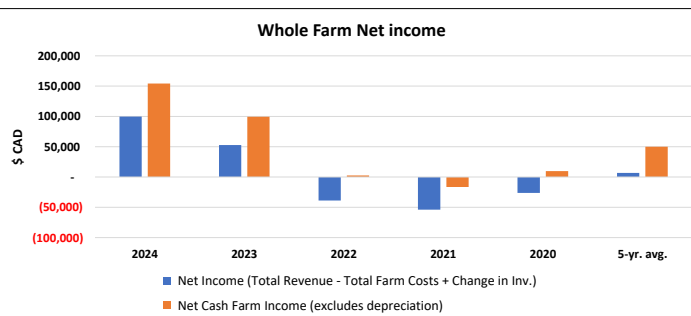
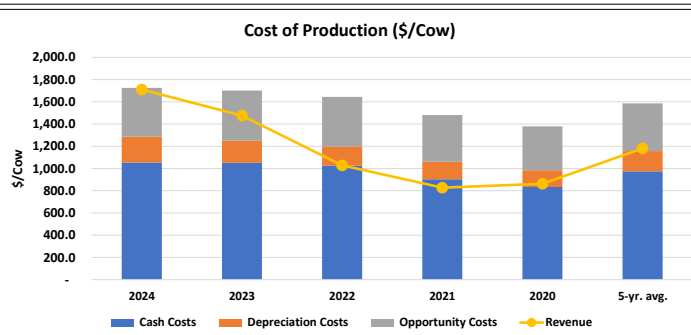
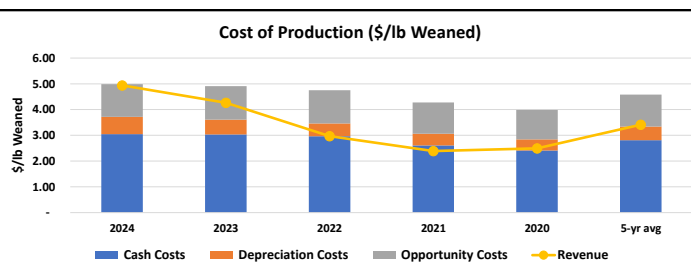
Depreciation = Linear depreciation on machinery and buildings, calculated on replacement values

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)	941						
Unpaid Labour (livestock only) (hours)	2,669						
Average wages - paid and unpaid (\$/hr)	25.00						
				Beef Animals Sold from Retained Ownership	N/A		
Revenue		2024	2023	2022	2021	2020	5-yr. avg.
Market Revenue	5-yr avg	401,312	345,517	245,044	196,588	208,252	279,343
Cow-Calf	97%	393,283	339,436	236,540	190,317	198,465	271,608
Cash Crops	3%	8,029	6,081	8,504	6,271	9,787	7,735
Retained Ownership	0%	-	-	-	-	-	-
Government Payments	0%	-	-	-	-	-	-
Other Farm Revenue †	0%	7	1	-	-	-	2
Total Revenue	100%	401,319	345,518	245,044	196,588	208,252	279,344
Change in Inventory		-	-	-	-	-	-
Expenses		2024	2023	2022	2021	2020	5-yr. avg.
Depreciation		54,750	46,527	41,247	37,427	36,111	43,212
Machinery		43,850	36,211	31,481	28,295	27,320	33,431
Buildings		10,900	10,316	9,766	9,132	8,791	9,781
Quota econ. Accounting		-	-	-	-	-	-
Overhead costs		82,058	86,627	87,922	73,712	65,890	79,242
Land improvement		-	-	-	-	-	-
Machinery Maintenance		17,947	16,441	16,657	16,400	15,967	16,682
Buildings Maintenance		7,000	6,758	6,421	5,812	5,544	6,307
Contract labour		-	-	-	-	-	-
Diesel, Gasoline, Natural Gas		21,611	23,578	27,377	18,264	13,217	20,810
Electricity		6,000	9,517	6,584	3,995	2,937	5,807
Water		-	-	-	-	-	-
Farm insurance		15,000	15,641	16,156	15,339	14,796	15,386
Disability and accident insurance		-	-	-	-	-	-
Farm taxes and duties		3,000	3,128	3,231	3,068	2,959	3,077
Advisor costs		-	-	-	-	-	-
Accountant & legal fees		5,000	5,214	5,385	5,113	4,932	5,129
Phone & utilities		3,500	3,418	3,290	3,081	2,981	3,254
Other overhead costs		3,000	2,930	2,820	2,641	2,555	2,789
Wages, rent and interest payments		50,719	49,186	46,945	43,722	41,458	46,406
Paid Labour		24,000	25,026	25,849	24,542	23,674	24,618
Total land rents		-	-	-	-	-	-
Total interest on debt		26,719	24,159	21,096	19,180	17,784	21,788
Cow-Calf		79,094	74,685	69,646	62,223	59,956	69,121
Animal purchases		30,000	24,973	19,722	17,255	17,887	21,967
Purchased feed		6,000	5,924	5,309	4,474	3,862	5,114
Other fixed and var. costs *		43,094	43,788	44,615	40,494	38,207	42,040
Retained Ownership		-	-	-	-	-	-
Animal purchases		-	-	-	-	-	-
Purchased feed		-	-	-	-	-	-
Other fixed and var. costs *		-	-	-	-	-	-
Crop and forage		35,079	35,693	38,028	33,536	31,203	34,708
Seed		2,240	2,232	2,111	2,010	1,937	2,106
Fertilizer		21,252	21,540	23,975	20,171	18,185	21,025
Herbicide		840	1,206	1,500	1,359	1,298	1,241
Fungicide & Insecticide		-	-	-	-	-	-
Irrigation		-	-	-	-	-	-
Contract labour		3,300	3,441	3,441	3,441	3,441	3,413
Fuel costs (crop & forage)		-	-	-	-	-	-
Other crop and forage		7,447	7,273	7,000	6,556	6,343	6,924
Total Farm Costs (excludes unpaid labour)		301,700	292,718	283,788	250,620	234,619	272,689
Cash Costs (Total Farm Costs - Depreciation)		246,950	246,191	242,541	213,194	198,508	229,477
Depreciation & Opportunity Costs (including unpaid labour)		121,469	113,247	107,967	104,146	102,830	109,932
Total Economic Costs (cash, depr, opportunity)		368,420	359,438	350,508	317,340	301,338	339,408
Profits		2024	2023	2022	2021	2020	5-yr. avg.
Net Income (Total Revenue - Total Farm Costs + Change in Inv.)		99,619	52,800	(38,744)	(54,032)	(26,367)	6,655
Net Cash Farm Income (excludes depreciation)		154,362	99,326	2,503	(16,605)	9,744	49,866

† 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)	2,144	1,847	1,260	998	1,057	1,461
REVENUE						
Cow Calf	1,710	1,476	1,028	827	863	1,181
Cull animals and slaughter receipts	337	289	215	183	185	242
Breeding livestock receipts	-	-	-	-	-	-
Calf Sales and transfer to retained ownership enterprise	1,372	1,187	813	644	678	939
Government payments	-	-	-	-	-	-
Other returns	-	-	-	-	-	-
Total Cow-Calf Revenue	1,710	1,476	1,028	827	863	1,181
VARIABLE COSTS						
Animal purchases	130.4	108.6	85.7	75.0	77.8	96
Feed (purchase feed, fertiliser, seed, pesticides)	157.1	158.8	165.7	143.6	131.3	151
Machinery (maintenance, depreciation, contractor)	276.9	239.1	216.2	202.3	193.6	226
Fuel, energy, lubricants, water	117.6	141.4	142.5	93.7	66.9	112
Vet & medicine	34.8	36.3	37.5	35.6	34.3	36
Other inputs cow calf enterprise	201.6	203.5	204.8	186.1	175.2	194
Labour						
Paid Labour	102.3	106.9	108.5	103.3	98.1	104
Unpaid Labour	293.1	306.4	311.0	296.1	281.2	298
Total Variable Costs	1,313.9	1,300.9	1,271.9	1,135.7	1,058.3	1,216
CAPITAL COSTS						
Insurance, taxes	76.3	79.7	81.1	77.2	73.5	78
Buildings (maintenance, depreciation)	76.3	72.9	67.9	62.9	59.4	68
Land Cost	-	-	-	-	-	-
Rented Land	-	-	-	-	-	-
Own Land	58.3	54.4	53.3	51.8	49.1	53
Capital Costs	-	-	-	-	-	-
Liabilities	113.8	103.2	88.5	80.7	73.7	92
Own capital	86.9	89.4	81.3	72.3	65.5	79
Total Capital Costs	411.7	399.6	372.2	345.0	321.2	370
COSTS						
Cash Costs	1,053.9	1,051.6	1,025.4	902.9	834.1	974
Depreciation Costs	233.3	198.7	173.1	157.5	149.6	182
Opportunity Costs	438.4	450.2	445.6	420.3	395.8	430
Total Production Costs	1,725.6	1,700.4	1,644.1	1,480.7	1,379.5	1,586
Profits	2024	2023	2022	2021	2020	5-yr. avg.
Short-term profit (cash costs)	656.0	424.3	3.0	(75.4)	28.8	207
Medium-term profit (cash + depreciation)	422.8	225.5	(170.1)	(232.9)	(120.8)	25
Long-term profit (cash + depreciation + opportunity)	(15.6)	(224.6)	(615.7)	(653.2)	(516.6)	(405)

*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	79,624	79,624	79,624	79,624	79,624	79,624
Average male and female weaning weight (lbs)	542	542	542	542	542	542
Average male and female calf price at weaning (\$/lb)	3.95	3.40	2.32	1.84	1.95	2.69
REVENUE						
Cow Calf Operation	4.94	4.26	2.97	2.39	2.49	3.41
Cull animals and slaughter receipts	0.97	0.84	0.62	0.53	0.53	0.70
Breeding livestock receipts	-	-	-	-	-	-
Calf Sales and transfer to retained ownership enterprise	3.96	3.43	2.35	1.86	1.96	2.71
Government payments	-	-	-	-	-	-
Other returns	-	-	-	-	-	-
Total Cow-Calf Revenue	4.94	4.26	2.97	2.39	2.49	3.41
VARIABLE COSTS						
Animal purchases	0.38	0.31	0.25	0.22	0.22	0.28
Feed (purchase feed, fertiliser, seed, pesticides)	0.45	0.46	0.48	0.41	0.38	0.44
Machinery (maintenance, depreciation, contractor)	0.80	0.69	0.62	0.58	0.56	0.65
Fuel, energy, lubricants, water	0.34	0.41	0.41	0.27	0.19	0.32
Vet & medicine	0.10	0.10	0.11	0.10	0.10	0.10
Other inputs cow calf enterprise	0.58	0.59	0.59	0.54	0.51	0.56
Labour						
Paid Labour	0.30	0.31	0.31	0.30	0.28	0.30
Unpaid Labour	0.85	0.89	0.90	0.86	0.81	0.86
Total Variable Costs	3.8	3.8	3.7	3.3	3.1	3.5
CAPITAL COSTS						
Insurance, taxes	0.22	0.23	0.23	0.22	0.21	0.22
Buildings (maintenance, depreciation)	0.22	0.21	0.20	0.18	0.17	0.20
Land Cost						
Rented Land	-	-	-	-	-	-
Owned Land	0.17	0.16	0.15	0.15	0.14	0.15
Capital Costs						
Liabilities	0.33	0.30	0.26	0.23	0.21	0.27
Own capital	0.25	0.26	0.23	0.21	0.19	0.23
Total Capital Costs	1.2	1.2	1.1	1.0	0.9	1.1
COSTS						
Cash Costs	3.04	3.04	2.96	2.61	2.41	2.81
Depreciation Costs	0.67	0.57	0.50	0.46	0.43	0.53
Opportunity Costs	1.27	1.30	1.29	1.21	1.14	1.24
Total Production Costs	4.98	4.91	4.75	4.28	3.98	4.58
Profits	2024	2023	2022	2021	2020	5-yr. avg.
Short-term profit (cash costs)	1.90	1.23	0.01	(0.22)	0.08	0.60
Medium-term profit (cash + depreciation)	1.22	0.65	(0.49)	(0.67)	(0.35)	0.07
Long-term profit (cash + depreciation + opportunity)	(0.05)	(0.65)	(1.78)	(1.89)	(1.49)	(1.17)

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.

