

Farm Characteristics	CA-BC-5
Farm Description	A cow-calf operation with 288 cows located one hour from Vanderhoof, utilizing predominantly homegrown feed and selling surplus hay.
Winter Feeding Ration (lbs/cow/day as fed)	193 days on hay and oat greenfeed (35 lb).
Retained Ownership/Replacement Ration (lb/head/day as fed)	Replacement heifers: 193 days on hay and oat 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	3 °C
Average Annual Precipitation (mm)	576 mm
Ecoregion	Vanderhoof
Stocking Rate (Animal Unit days per acre)	26
Fertilize Hay (yes/no)	Yes
Fertilize Pasture (yes/no)	N/A
Typical Hay Yield (tonnes/acre)	2.1
Grassland Acres (owned+rented)	600
Crop Acres (includes hay) (owned+rented)	600
Bush and other acres	N/A

Physical Performance Indicators	
Breed	N/A
Cow:Bull Ratio	25
Bull Culling Rate (%)	33%
Mature Cow Weight (lb)	1,400
Heifer Retention for a steady herd (%)	13%
Cow Death Loss (%)	1.7%
Cow Culling Rate (%)	11.5%
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)	549
Weaning Weight (lb)	515
205 day adjusted Weaning Weight (lb)	572
Average Daily Gain pre-weaning (lb)	2.38
Weaning Weight as % of Cow Weight	37%

Production System	
Herd size	288
Days on field feeding (e.g. swath grazing)	0
Days supplemented on pasture	0
Days on full winter feed	193
Calving Start date	April 08
Weaning date	October 20
Sale date	October 20
Retained ownership	Replacements
% of feed purchased	0.4%
% 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)

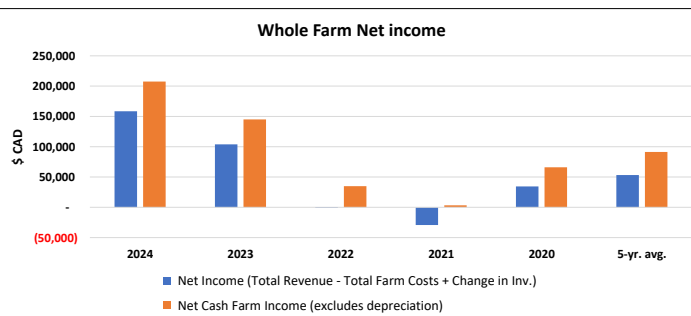
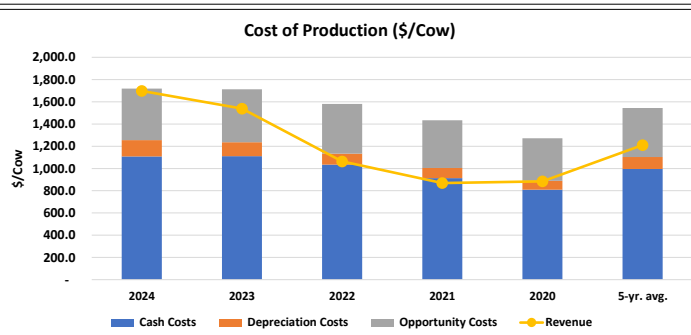
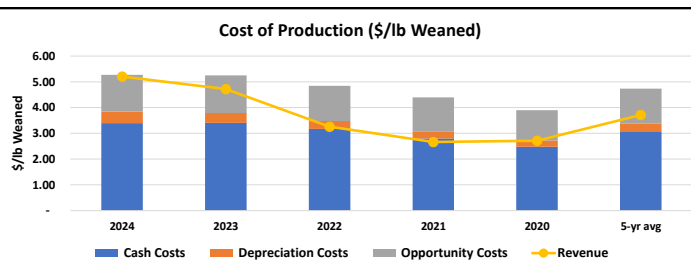
Depreciation = Linear depreciation on machinery and buildings, calculated on replacement values

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	288						
Paid Labour (livestock only) (hours)	690			Beef Animals Sold from Retained Ownership	N/A		
Unpaid Labour (livestock only) (hours)	2,801						
Average wages - paid and unpaid (\$/hr)	25.00						
Revenue		2024	2023	2022	2021	2020	5-yr. avg.
Market Revenue	5-yr avg	566,856	502,146	388,858	311,213	349,753	423,765
Cow-Calf	82%	488,864	443,075	306,250	250,296	254,686	348,634
Cash Crops	18%	77,993	59,071	82,607	60,917	95,068	75,131
Retained Ownership	0%	-	-	-	-	-	-
Government Payments	0%	-	-	-	-	-	-
Other Farm Revenue †	0%	6	1	-	-	0	1
Total Revenue	100%	566,862	502,147	388,858	311,213	349,753	423,767
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		126,047	132,419	137,432	111,917	97,748	121,113
Land improvement		-	-	-	-	-	-
Machinery Maintenance		28,755	26,342	26,688	26,276	25,583	26,729
Buildings Maintenance		9,000	8,689	8,256	7,473	7,128	8,109
Contract labour		-	-	-	-	-	-
Diesel, Gasoline, Natural Gas		45,792	49,961	58,009	38,700	28,006	44,094
Electricity		7,000	11,104	7,682	4,661	3,427	6,775
Water		-	-	-	-	-	-
Farm insurance		18,000	18,770	19,387	18,406	17,756	18,464
Disability and accident insurance		-	-	-	-	-	-
Farm taxes and duties		2,000	2,086	2,154	2,045	1,973	2,052
Advisor costs		-	-	-	-	-	-
Accountant & legal fees		5,000	5,214	5,385	5,113	4,932	5,129
Phone & utilities		4,500	4,395	4,230	3,961	3,833	4,184
Other overhead costs		6,000	5,860	5,640	5,282	5,110	5,578
Wages, rent and interest payments		55,395	52,319	47,955	44,040	41,031	48,148
Paid Labour		20,000	20,855	21,541	20,451	19,729	20,515
Total land rents		-	-	-	-	-	-
Total interest on debt		35,395	31,464	26,414	23,588	21,303	27,633
Cow-Calf		125,830	119,756	112,085	102,665	99,594	111,986
Animal purchases		32,000	26,638	21,037	18,405	19,080	23,432
Purchased feed		7,500	7,405	6,637	5,592	4,827	6,392
Other fixed and var. costs *		86,330	85,713	84,412	78,668	75,687	82,162
Retained Ownership		-	-	-	-	-	-
Animal purchases		-	-	-	-	-	-
Purchased feed		-	-	-	-	-	-
Other fixed and var. costs *		-	-	-	-	-	-
Crop and forage		52,061	52,653	56,425	49,266	45,484	51,178
Seed		6,050	6,029	5,702	5,428	5,232	5,688
Fertilizer		37,100	37,603	41,853	35,213	31,745	36,703
Herbicide		-	-	-	-	-	-
Fungicide & Insecticide		-	-	-	-	-	-
Irrigation		-	-	-	-	-	-
Contract labour		4,800	5,005	5,005	5,005	5,005	4,964
Fuel costs (crop & forage)		-	-	-	-	-	-
Other crop and forage		4,111	4,015	3,864	3,619	3,501	3,822
Total Farm Costs (excludes unpaid labour)		408,308	398,208	389,970	340,476	315,311	370,455
Cash Costs (Total Farm Costs - Depreciation)		359,333	357,147	353,898	307,888	283,857	332,424
Depreciation & Opportunity Costs (including unpaid labour)		118,991	111,077	106,089	102,604	101,469	108,046
Total Economic Costs (cash, depr, opportunity)		478,324	468,224	459,986	410,492	385,326	440,471
Profits		2024	2023	2022	2021	2020	5-yr. avg.
Net Income (Total Revenue - Total Farm Costs + Change in Inv.)		158,554	103,939	(1,113)	(29,263)	34,443	53,312
Net Cash Farm Income (excludes depreciation)		207,523	145,000	34,960	3,326	65,896	91,341

† 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*	288	288	288	288	288	288
Average male and female calf price (\$/head)	2,020	1,865	1,251	1,006	1,034	1,435
REVENUE						
Cow Calf	1,697	1,538	1,063	869	884	1,211
Cull animals and slaughter receipts	403	347	258	219	221	290
Breeding livestock receipts	-	-	-	-	-	-
Calf Sales and transfer to retained ownership enterprise	1,294	1,191	806	650	663	921
Government payments	-	-	-	-	-	-
Other returns	-	-	-	-	-	-
Total Cow-Calf Revenue	1,697	1,538	1,063	869	884	1,211
VARIABLE COSTS						
Animal purchases	111.1	92.5	73.0	63.9	66.2	81
Feed (purchase feed, fertiliser, seed, pesticides)	142.9	143.6	150.2	128.9	116.9	137
Machinery (maintenance, depreciation, contractor)	229.3	204.0	171.4	164.8	146.1	183
Fuel, energy, lubricants, water	158.1	187.1	179.6	121.1	79.5	145
Vet & medicine	34.7	36.2	37.4	35.5	34.3	36
Other inputs cow calf enterprise	311.4	308.8	297.4	277.7	263.6	292
Labour						
Paid Labour	59.9	63.9	58.9	57.1	49.9	58
Unpaid Labour	257.9	275.1	253.7	245.9	214.8	249
Total Variable Costs	1,305.4	1,311.2	1,221.8	1,095.0	971.3	1,181
CAPITAL COSTS						
Insurance, taxes	58.8	62.7	58.3	56.5	49.8	57
Buildings (maintenance, depreciation)	42.3	41.5	35.1	32.9	28.5	36
Land Cost	-	-	-	-	-	-
Rented Land	-	-	-	-	-	-
Own Land	157.7	145.1	144.8	138.5	126.3	142
Capital Costs	-	-	-	-	-	-
Liabilities	106.0	96.4	72.2	65.9	53.9	79
Own capital	48.7	55.8	48.7	45.8	42.6	48
Total Capital Costs	413.5	401.5	359.2	339.4	301.0	363
COSTS						
Cash Costs	1,108.0	1,110.8	1,035.2	913.2	809.1	995
Depreciation Costs	146.7	125.8	98.6	91.0	79.5	108
Opportunity Costs	464.3	476.1	447.2	430.2	383.7	440
Total Production Costs	1,718.9	1,712.7	1,581.0	1,434.4	1,272.3	1,544
Profits	2024	2023	2022	2021	2020	5-yr. avg.
Short-term profit (cash costs)	589.5	427.6	28.2	(44.1)	75.2	215
Medium-term profit (cash + depreciation)	442.8	301.8	(70.4)	(135.1)	(4.3)	107
Long-term profit (cash + depreciation + opportunity)	(21.4)	(174.3)	(517.6)	(565.3)	(388.0)	(333)

*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

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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	93,949	93,949	93,949	93,949	93,949	93,949
Average male and female weaning weight (lbs)	515	515	515	515	515	515
Average male and female calf price at weaning (\$/lb)	3.92	3.62	2.43	1.95	2.01	2.79
REVENUE						
Cow Calf Operation	5.20	4.72	3.26	2.66	2.71	3.71
Cull animals and slaughter receipts	1.24	1.07	0.79	0.67	0.68	0.89
Breeding livestock receipts	-	-	-	-	-	-
Calf Sales and transfer to retained ownership enterprise	3.97	3.65	2.47	1.99	2.03	2.82
Government payments	-	-	-	-	-	-
Other returns	-	-	-	-	-	-
Total Cow-Calf Revenue	5.20	4.72	3.26	2.66	2.71	3.71
VARIABLE COSTS						
Animal purchases	0.34	0.28	0.22	0.20	0.20	0.25
Feed (purchase feed, fertiliser, seed, pesticides)	0.44	0.44	0.46	0.40	0.36	0.42
Machinery (maintenance, depreciation, contractor)	0.70	0.63	0.53	0.51	0.45	0.56
Fuel, energy, lubricants, water	0.48	0.57	0.55	0.37	0.24	0.44
Vet & medicine	0.11	0.11	0.11	0.11	0.10	0.11
Other inputs cow calf enterprise	0.95	0.95	0.91	0.85	0.81	0.89
Labour						
Paid Labour	0.18	0.20	0.18	0.18	0.15	0.18
Unpaid Labour	0.79	0.84	0.78	0.75	0.66	0.76
Total Variable Costs	4.0	4.0	3.7	3.4	3.0	3.6
CAPITAL COSTS						
Insurance, taxes	0.18	0.19	0.18	0.17	0.15	0.18
Buildings (maintenance, depreciation)	0.13	0.13	0.11	0.10	0.09	0.11
Land Cost						
Rented Land	-	-	-	-	-	-
Owned Land	0.48	0.44	0.44	0.42	0.39	0.44
Capital Costs						
Liabilities	0.32	0.30	0.22	0.20	0.17	0.24
Own capital	0.15	0.17	0.15	0.14	0.13	0.15
Total Capital Costs	1.3	1.2	1.1	1.0	0.9	1.1
COSTS						
Cash Costs	3.40	3.41	3.17	2.80	2.48	3.05
Depreciation Costs	0.45	0.39	0.30	0.28	0.24	0.33
Opportunity Costs	1.42	1.46	1.37	1.32	1.18	1.35
Total Production Costs	5.27	5.25	4.85	4.40	3.90	4.73
Profits	2024	2023	2022	2021	2020	5-yr. avg.
Short-term profit (cash costs)	1.81	1.31	0.09	(0.14)	0.23	0.66
Medium-term profit (cash + depreciation)	1.36	0.93	(0.22)	(0.41)	(0.01)	0.33
Long-term profit (cash + depreciation + opportunity)	(0.07)	(0.53)	(1.59)	(1.73)	(1.19)	(1.02)

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