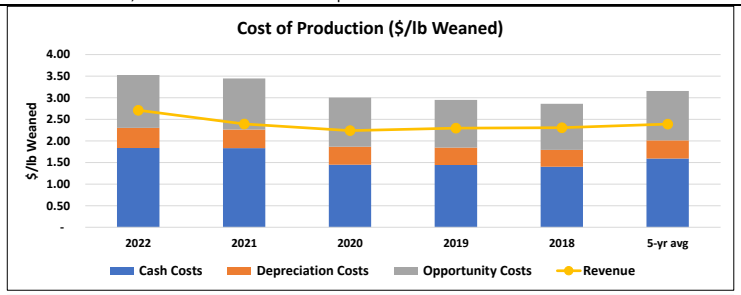
Farm Summary

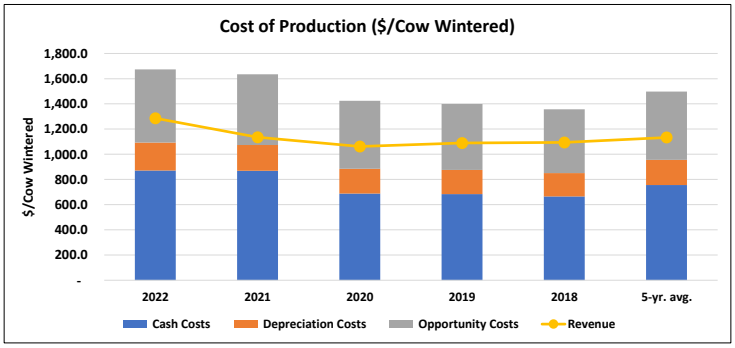
Farm Characteristics	*CA-BC-2*
Farm Description	A cow-calf operation producing predominantly homegrown feed located in the ranchlands of central B.C. characterized by plateaus, mountains and grasslands suited to cattle production.
Winter Feeding Ration (lbs/cow/day as fed)	210 days of winter feeding on homegrown hay (40 lb), grain screening pellets (4.5 lb) for 30 days at calving, with mineral (100 g) and salt (50 g) bale shredded on pasture.
Retained Ownership/Replacement Ration (lb/head/day as fed)	210 days of winter feeding on homegrown hay (12.6 lb), grain screening pellets (5.5 lb), with mineral (60 g) and salt (34 g) confined.
Disclaimer:	This benchmark is based on 5 farms of data; outliers were excluded as required.

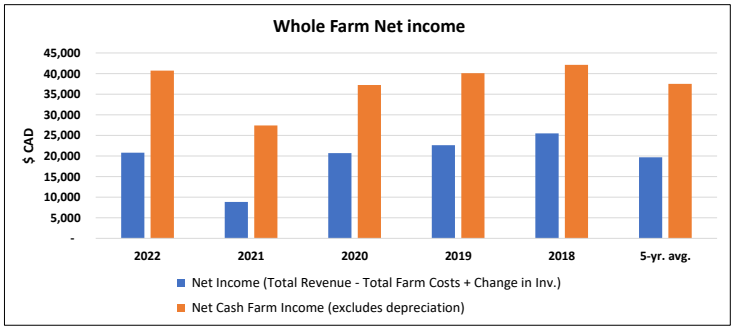
Environment	
Average Annual Temperature	0.5 to 7.5 C
Average Annual Precipitation (mm)	650mm
Ecoregion	Central Interior
Stocking Rate (Animal Unit days per acre)	22
Fertilize Hay (yes/no)	No
Fertilize Pasture (yes/no)	No
Typical Hay Yield (tonnes/acre)	1.4
Grassland Acres (owned+rented)	859
Crop Acres (includes hay) (owned+rented)	348
Bush and other acres	761

Physical Performance Indicators	
Breed	Angus, Hereford, Simmental, Limousin
Cow:Bull Ratio	22:1
Bull Culling Rate (%)	22%
Mature Cow Weight (lb)	1,340
Heifer Retention for a steady herd (%)	10%
Cow Death Loss (%)	0.9%
Cow Culling Rate (%)	9.4%
Calves alive after 24hr/100 Cows exposed	96
Calf Death Loss (%) 24 hr to weaning	3%
Calves weaned per 100 cows exposed	93
Total Liveweight Sold per Cow (lb)	641
Weaning Weight (lb)	584
205 day adjusted Weaning Weight (lb)	596
Average Daily Gain pre-weaning (lb)	2.48
Weaning Weight as % of Cow Weight	44%

Production System	
Herd size	90
Days on field feeding (e.g. swath grazing)	0
Days supplemented on pasture	0
Days on full winter feed	210
Calving Start date	March 15
Weaning date	October 25
Sale date	October 25
Retained ownership	Replacements
% of feed purchased	3.0%
% 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

NOTE: Feed costs are based on cost of production if homegrown.

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Whole Farm Overview Page

Overview							
Operation Maturity	Mature						
Herd Size	90	Beef Animals Sold from Retained Ownership			N/A		
Paid Labour (livestock only) (hours)	-						
Unpaid Labour (livestock only) (hours)	1,256						
Average wages - paid and unpaid ($/hr)	21.00						

Revenue		**2022**	**2021**	**2020**	**2019**	**2018**	**5-yr. avg.**
Market Revenue	***5-yr avg***	***115,770***	***93,137***	***95,571***	***98,038***	***98,436***	***100,190***
Cow-Calf	94%	115,770	93,137	95,571	98,038	98,436	*100,190*
Cash Crops	0%	-	-	-	-	-	-
Retained Ownership	0%	-	-	-	-	-	-
Government Payments	2%	-	***9,000***	-	-	-	***1,800***
Other Farm Revenue ǂ	4%	4,506	4,501	4,503	4,506	4,506	4,505
Total Revenue	***100%***	***120,276***	***106,638***	***100,075***	***102,543***	***102,942***	***106,495***
Change in Inventory		-	(187)	1,151	(187)	-	155

Expenses	**2022**	**2021**	**2020**	**2019**	**2018**	**5-yr. avg.**
Depreciation	***19,943***	***18,376***	***17,709***	***17,302***	***16,666***	***17,999***
Machinery	7,502	6,742	6,510	6,293	5,930	*6,595*
Buildings	12,441	11,634	11,199	11,009	10,737	*11,404*
Quota econ. Accounting	-	-	-	-	-	-
Overhead costs	***50,460***	***40,830***	***37,648***	***38,349***	***37,709***	***40,999***
Land improvement	5,878	5,567	5,354	5,346	5,183	*5,466*
Machinery Maintenance	12,214	11,969	11,774	11,570	11,093	*11,724*
Buildings Maintenance	1,564	1,435	1,350	1,369	1,342	*1,412*
Contract labour	2,492	2,366	2,282	2,214	2,118	*2,294*
Diesel, Gasoline, Natural Gas	17,172	10,093	8,283	9,455	9,967	*10,994*
Electricity	3,369	2,044	1,503	1,471	1,348	*1,947*
Water	-	-	-	-	-	-
Farm insurance	4,204	3,991	3,850	3,735	3,572	*3,871*
Disability and accident insurance	-	-	-	-	-	-
Farm taxes and duties	944	897	865	839	803	*869*
Advisor costs	705	670	646	627	599	*649*
Accountant & legal fees	246	233	225	218	209	*226*
Phone & utilities	1,171	1,097	1,061	1,053	1,033	*1,083*
Other overhead costs	501	469	454	451	442	*463*
Wages, rent and interest payments	***5,800***	***6,186***	***6,235***	***5,728***	***5,241***	***5,838***
Paid Labour	-	-	-	-	-	-
Total land rents	2,140	2,011	1,765	1,665	1,600	*1,836*
Total Interest on debt	3,660	4,175	4,469	4,063	3,641	*4,002*
Cow-Calf	***21,378***	***30,416***	***17,216***	***16,536***	***16,148***	***20,339***
Animal purchases	1,886	1,886	1,886	1,886	1,886	*1,886*
Purchased feed	9,660	20,403	8,111	7,687	7,630	*10,698*
Other fixed and var. costs *	9,832	8,126	7,218	6,962	6,632	*7,754*
Retained Ownership	-	-	-	-	-	-
Animal purchases	-	-	-	-	-	-
Purchased feed	-	-	-	-	-	-
Other fixed and var. costs *	-	-	-	-	-	-
Crop and forage	***1,915***	***1,810***	***1,736***	***1,832***	***1,713***	***1,801***
Seed	1,682	1,592	1,524	1,622	1,507	*1,585*
Fertilizer	-	-	-	-	-	-
Herbicide	-	-	-	-	-	-
Fungicide & Insecticide	-	-	-	-	-	-
Irrigation	-	-	-	-	-	-
Contract labour	-	-	-	-	-	-
Fuel costs (crop & forage)	-	-	-	-	-	-
Other crop and forage	233	219	212	210	206	*216*
Total Farm Costs (excludes unpaid labour)	***99,496***	***97,618***	***80,543***	***79,747***	***77,478***	***86,977***
Cash Costs (Total Farm Costs - Depreciation)	79,553	79,242	62,834	62,445	60,812	68,977
Depreciation & Opportunity Costs (including unpaid labour)	46,316	44,749	44,082	43,675	43,039	44,372
Total Economic Costs (cash, depr, opportunity)	125,869	123,991	106,916	106,120	103,851	113,349

Profits	**2022**	**2021**	**2020**	**2019**	**2018**	**5-yr. avg.**
Net Income (Total Revenue - Total Farm Costs + Change in Inv.)	**20,779**	**8,832**	**20,682**	**22,609**	**25,464**	**19,673**
Net Cash Farm Income (excludes depreciation)	**40,716**	**27,394**	**37,238**	**40,093**	**42,124**	**37,513**

ǂ 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 ($/Cow Wintered)	2022	2021	2020	2019	2018	5 yr. avg.
Cows Wintered *	90	90	90	90	90	90
Average male and female calf price ($/head)	1,397	1,131	1,151	1,172	1,182	*1,207*
REVENUE						
Cow Calf	1,286	1,135	1,062	1,089	1,094	1,133
Cull animals and slaughter receipts	138	104	117	127	123	122
Breeding livestock receipts	-	-	-	-	-	-
Calf Sales and transfer to retained ownership enterprise	1,148	930	944	962	970	991
Government payments	-	100.0	-	-	-	20.0
Other returns	-	-	-	-	-	-
Total Cow-Calf Revenue	1,286	1,135	1,062	1,089	1,094	1,133
VARIABLE COSTS						
Animal purchases	21.0	21.0	21.0	21.0	21.0	21
Feed (purchase feed, fertiliser, seed, pesticides)	194.0	308.7	168.9	165.2	161.4	200
Machinery (maintenance, depreciation, contractor)	247.0	234.2	228.5	223.1	212.7	229
Fuel, energy, lubricants, water	232.0	136.0	109.2	121.3	124.9	145
Vet & medicine	26.0	24.3	22.0	18.9	17.2	22
Other inputs cow calf enterprise	96.0	82.6	76.1	76.1	74.1	81
Labour						
Paid Labour	-	-	-	-	-	-
Unpaid Labour	291.0	276.6	266.9	258.9	247.6	268
Total Variable Costs	1,107.0	1,083.4	892.6	884.4	858.9	965
CAPITAL COSTS						
Insurance, taxes	58.0	54.4	52.6	51.0	48.8	53
Buildings (maintenance, depreciation)	156.0	145.2	139.4	137.5	134.2	142
Land Cost	-	-	-	-	-	
Rented Land	24.0	22.3	19.6	18.5	17.8	20
Own Land	237.0	229.6	215.5	209.7	206.0	220
Capital Costs	-	-	-	-	-	
Liabilities	39.0	44.4	47.5	43.2	38.7	43
Own capital	53.0	55.8	57.8	55.4	52.5	55
Total Capital Costs	567.0	551.8	532.4	515.4	498.0	533
COSTS						
Cash Costs	871.0	869.0	688.0	683.5	665.6	755
Depreciation Costs	222.0	204.2	196.8	192.2	185.2	200
Opportunity Costs	581.0	562.0	540.2	524.1	506.1	543
Total Production Costs	1,674.0	1,635.1	1,425.0	1,399.8	1,356.9	1,498
Profits	**2022**	**2021**	**2020**	**2019**	**2018**	**5-yr. avg.**
Short-term profit (cash costs)	415.0	265.9	373.9	405.8	428.2	378
Medium-term profit (cash + depreciation)	193.0	61.7	177.1	213.5	243.0	178
Long-term profit (cash + depreciation + opportunity)	(388.0)	(500.3)	(363.1)	(310.5)	(263.1)	(365)

*Model Maintains a stable herd size

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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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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 ($/lb Weaned)	2022	2021	2020	2019	2018	5 yr. avg.
Pounds Weaned	42,696	42,696	42,696	42,696	42,696	42,696
Average male and female weaning weight (lbs)	584	584	584	584	584	
Average male and female calf price at weaning ($/lb)	2.39	1.94	1.97	2.01	2.02	2.07
REVENUE						
Cow Calf Operation	2.71	2.39	2.24	2.30	2.31	2.39
Cull animals and slaughter receipts	0.29	0.22	0.25	0.27	0.26	0.26
Breeding livestock receipts	-	-	-	-	-	-
Calf Sales and transfer to retained ownership enterprise	2.42	1.96	1.99	2.03	2.05	2.09
Government payments	-	0.21	-	-	-	0.04
Other returns	-	-	-	-	-	-
Total Cow-Calf Revenue	2.71	2.39	2.24	2.30	2.31	2.39
VARIABLE COSTS						
Animal purchases	0.04	0.04	0.04	0.04	0.04	0.04
Feed (purchase feed, fertiliser, seed, pesticides)	0.41	0.65	0.36	0.35	0.34	0.42
Machinery (maintenance, depreciation, contractor)	0.52	0.49	0.48	0.47	0.45	0.48
Fuel, energy, lubricants, water	0.49	0.29	0.23	0.26	0.26	0.30
Vet & medicine	0.05	0.05	0.05	0.04	0.04	0.05
Other inputs cow calf enterprise	0.20	0.17	0.16	0.16	0.16	0.17
Labour						
Paid Labour	-	-	-	-	-	-
Unpaid Labour	0.61	0.58	0.56	0.55	0.52	0.57
Total Variable Costs	2.3	2.3	1.9	1.9	1.8	2.0
CAPITAL COSTS						
Insurance, taxes	0.12	0.11	0.11	0.11	0.10	0.11
Buildings (maintenance, depreciation)	0.33	0.31	0.29	0.29	0.28	0.30
Land Cost						
Rented Land	0.05	0.05	0.04	0.04	0.04	0.04
Owned Land	0.50	0.48	0.45	0.44	0.43	0.46
Capital Costs						
Liabilities	0.08	0.09	0.10	0.09	0.08	0.09
Own capital	0.11	0.12	0.12	0.12	0.11	0.12
Total Capital Costs	1.2	1.2	1.1	1.1	1.0	1.1
COSTS						
Cash Costs	1.84	1.83	1.45	1.44	1.40	1.59
Depreciation Costs	0.47	0.43	0.41	0.41	0.39	0.42
Opportunity Costs	1.22	1.18	1.14	1.10	1.07	1.14
Total Production Costs	3.53	3.45	3.00	2.95	2.86	3.16
Profits	**2022**	**2021**	**2020**	**2019**	**2018**	**5-yr. avg.**
Short-term profit (cash costs)	0.87	0.56	0.79	0.86	0.90	0.80
Medium-term profit (cash + depreciation)	0.41	0.13	0.37	0.45	0.51	0.37
Long-term profit (cash + depreciation + opportunity)	(0.82)	(1.05)	(0.77)	(0.65)	(0.55)	(0.77)

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