



<b>Farm Characteristics</b>	<b>CA-BC-6</b>
<b>Farm Description</b>	A cow-calf operation with 37 cows, utilizing purchased feed.
<b>Winter Feeding Ration (lbs/cow/day as fed)</b>	186 days on hay (40 lb), and protein supplement (0.5 lb)
<b>Retained Ownership/Replacement Ration (lb/head/day as fed)</b>	Replacements: 186 days on hay (26 lb) and protein supplement (0.3 lb)
<b>Disclaimer:</b>	This benchmark is based on 3 farms of data; outliers were excluded as required. Canfax Research Services (CRS) tries to provide quality information, but we make no claims, promises, or guarantees about the accuracy, completeness, or adequacy of the information. CRS does not guarantee and accepts no legal liability arising from or connected to, the accuracy, reliability, or completeness of any material contained in our publications. Reproduction and/or electronic transmission of this publication, in whole or in part, is strictly forbidden without written consent from CRS.

Environment	
Average Annual Temperature	3° C
Average Annual Precipitation (mm)	250-300
	Okanagan Plateau
Ecoregion	ecoregion
Stocking Rate (Animal Unit days per acre)	28
Fertilize Hay (yes/no)	No
Fertilize Pasture (yes/no)	No
Typical Hay Yield (tonnes/acre)	N/A
Grassland Acres (owned+rented)	409
Crop Acres (includes hay) (owned+rented)	0
Bush and other acres	0

Physical Performance Indicators	
	Angus, Hereford, Charolais, Short Horn, Gelbvieh
Breed	
Cow:Bull Ratio	19:1
Bull Culling Rate (%)	25%
Mature Cow Weight (lb)	1,400
Heifer Retention for a steady herd (%)	14%
Cow Death Loss (%)	2.3%
Cow Culling Rate (%)	10.8%
Calves alive after 24hr/100 Cows exposed	92
Calf Death Loss (%) 24 hr to weaning	2%
Calves weaned per 100 cows exposed	92
Total Liveweight Sold per Cow (lb)	577
Weaning Weight (lb)	517
205 day adjusted Weaning Weight (lb)	544
Average Daily Gain pre-weaning (lb)	2.24
Weaning Weight as % of Cow Weight	37%

Production System	
Herd size	37
Days on field feeding (e.g. swath grazing)	0
Days supplemented on pasture	0
Days on full winter feed	186
Calving Start date	April 01
Weaning date	October 24
Sale date	October 24
Retained ownership	Replacements
% of feed purchased	100.0%
% of land in crops	0%
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

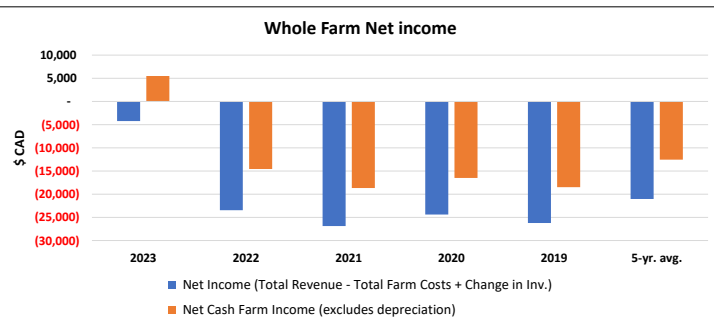
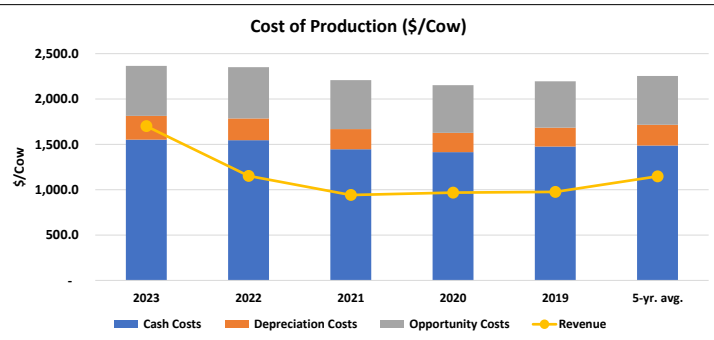
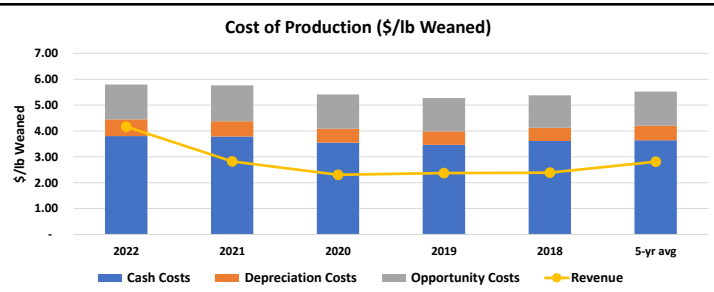
Footnotes:

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 Overview Page

Overview							
Operation Maturity	Medium						
Herd Size	37			Beef Animals Sold from Retained Ownership	N/A		
Paid Labour (livestock only) (hours)	12						
Unpaid Labour (livestock only) (hours)	1,000						
Average wages - paid and unpaid (\$/hr)	18.39						
Revenue		2023	2022	2021	2020	2019	5-yr. avg.
<b>Market Revenue</b>	<b>5-yr avg</b>	<b>62,912</b>	<b>42,605</b>	<b>34,831</b>	<b>35,812</b>	<b>36,092</b>	<b>42,450</b>
Cow-Calf	100%	62,912	42,605	34,831	35,812	36,092	42,450
Cash Crops	0%	-	-	-	-	-	-
Retained Ownership	0%	-	-	-	-	-	-
<b>Government Payments</b>	0%	-	-	-	-	-	-
<b>Other Farm Revenue †</b>	0%	19	-	3	0	-	4
<b>Total Revenue</b>	<b>100%</b>	<b>62,930</b>	<b>42,605</b>	<b>34,834</b>	<b>35,812</b>	<b>36,092</b>	<b>42,455</b>
Change in Inventory		-	-	-	-	-	-
Expenses		2023	2022	2021	2020	2019	5-yr. avg.
<b>Depreciation</b>		<b>9,737</b>	<b>8,905</b>	<b>8,199</b>	<b>7,902</b>	<b>7,718</b>	<b>8,492</b>
Machinery		4,053	3,524	3,167	3,058	2,956	3,352
Buildings		5,684	5,381	5,032	4,844	4,761	5,140
Quota econ. Accounting		-	-	-	-	-	-
<b>Overhead costs</b>		<b>17,712</b>	<b>17,178</b>	<b>14,704</b>	<b>13,356</b>	<b>13,683</b>	<b>15,327</b>
Land improvement		1,763	1,664	1,622	1,601	1,566	1,643
Machinery Maintenance		1,964	1,842	1,835	1,775	1,755	1,834
Buildings Maintenance		1,010	960	916	922	892	940
Contract labour		-	-	-	-	-	-
Diesel, Gasoline, Natural Gas		3,843	4,277	2,973	2,214	2,800	3,221
Electricity		2,676	1,851	1,123	826	808	1,457
Water		-	-	-	-	-	-
Farm insurance		2,614	2,700	2,563	2,473	2,399	2,550
Disability and accident insurance		-	-	-	-	-	-
Farm taxes and duties		1,662	1,717	1,630	1,572	1,525	1,621
Advisor costs		-	-	-	-	-	-
Accountant & legal fees		968	1,000	949	916	889	944
Phone & utilities		1,178	1,133	1,061	1,027	1,019	1,084
Other overhead costs		35	33	31	30	30	32
<b>Wages, rent and interest payments</b>		<b>9,044</b>	<b>9,714</b>	<b>9,039</b>	<b>9,570</b>	<b>11,871</b>	<b>9,848</b>
Paid Labour		239	247	234	226	219	233
Total land rents		3,321	3,321	3,321	3,321	3,321	3,321
Total Interest on debt		5,484	6,146	5,484	6,023	8,331	6,294
<b>Cow-Calf</b>		<b>30,659</b>	<b>30,280</b>	<b>29,769</b>	<b>29,392</b>	<b>29,033</b>	<b>29,827</b>
Animal purchases		938	938	938	938	938	938
Purchased feed		27,737	27,453	27,068	26,785	26,516	27,112
Other fixed and var. costs *		1,984	1,889	1,764	1,670	1,579	1,777
<b>Retained Ownership</b>		<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
Animal purchases		-	-	-	-	-	-
Purchased feed		-	-	-	-	-	-
Other fixed and var. costs *		-	-	-	-	-	-
<b>Crop and forage</b>		<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
Seed		-	-	-	-	-	-
Fertilizer		-	-	-	-	-	-
Herbicide		-	-	-	-	-	-
Fungicide & Insecticide		-	-	-	-	-	-
Irrigation		-	-	-	-	-	-
Contract labour		-	-	-	-	-	-
Fuel costs (crop & forage)		-	-	-	-	-	-
Other crop and forage		-	-	-	-	-	-
<b>Total Farm Costs (excludes unpaid labour)</b>		<b>67,153</b>	<b>66,077</b>	<b>61,712</b>	<b>60,220</b>	<b>62,305</b>	<b>63,493</b>
Cash Costs (Total Farm Costs - Depreciation)		57,415	57,172	53,513	52,318	54,588	55,001
Depreciation & Opportunity Costs (including unpaid labour)		28,138	27,306	26,600	26,303	26,118	26,893
Total Economic Costs (cash, depr, opportunity)		85,553	84,477	80,113	78,621	80,706	81,894
Profits		2023	2022	2021	2020	2019	5-yr. avg.
<b>Net Income (Total Revenue - Total Farm Costs + Change in Inv.)</b>		<b>(4,222)</b>	<b>(23,472)</b>	<b>(26,878)</b>	<b>(24,407)</b>	<b>(26,213)</b>	<b>(21,038)</b>
<b>Net Cash Farm Income (excludes depreciation)</b>		<b>5,496</b>	<b>(14,567)</b>	<b>(18,682)</b>	<b>(16,506)</b>	<b>(18,495)</b>	<b>(12,551)</b>

† 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



<b>Cow-Calf Enterprise (\$/Cow)</b>	<b>2023</b>	<b>2022</b>	<b>2021</b>	<b>2020</b>	<b>2019</b>	<b>5 yr. avg.</b>
No. of Cows*	37	37	37	37	37	37
Average male and female calf price (\$/head)	1,900	1,273	1,023	1,053	1,060	1,261
<b>REVENUE</b>						
Cow Calf	1,700	1,151	941	968	975	1,147
Cull animals and slaughter receipts	197	139	126	133	133	146
Breeding livestock receipts	-	-	-	-	-	-
Calf Sales and transfer to retained ownership enterprise	1,503	1,012	816	835	843	1,002
Government payments	-	-	-	-	-	-
Other returns	-	-	-	-	-	-
<b>Total Cow-Calf Revenue</b>	<b>1,700</b>	<b>1,151</b>	<b>941</b>	<b>968</b>	<b>975</b>	<b>1,147</b>
<b>VARIABLE COSTS</b>						
Animal purchases	25.3	25.3	25.3	25.3	25.3	25
Feed (purchase feed, fertiliser, seed, pesticides)	797.3	787.0	775.4	767.2	759.0	777
Machinery (maintenance, depreciation, contractor)	162.6	145.0	135.2	130.6	127.3	140
Fuel, energy, lubricants, water	176.2	165.6	110.7	82.2	97.5	126
Vet & medicine	19.7	18.5	17.1	15.6	13.6	17
Other inputs cow calf enterprise	92.9	91.1	85.7	82.8	81.4	87
Labour						
Paid Labour	6.5	6.7	6.3	6.1	5.9	6
Unpaid Labour	471.1	486.6	462.0	445.7	432.4	460
<b>Total Variable Costs</b>	<b>1,751.6</b>	<b>1,725.9</b>	<b>1,617.9</b>	<b>1,555.6</b>	<b>1,542.5</b>	<b>1,639</b>
<b>CAPITAL COSTS</b>						
Insurance, taxes	115.6	119.4	113.3	109.3	106.1	113
Buildings (maintenance, depreciation)	180.9	171.4	160.7	155.8	152.8	164
Land Cost	-	-	-	-	-	-
Rented Land	89.8	89.8	89.8	89.8	89.8	90
Own Land	78.5	78.5	78.5	78.5	78.5	79
Capital Costs	-	-	-	-	-	-
Liabilities	148.2	166.1	148.2	162.8	225.2	170
Own capital	0.0	0.0	0.0	0.0	0.0	0
<b>Total Capital Costs</b>	<b>613.0</b>	<b>625.2</b>	<b>590.6</b>	<b>596.2</b>	<b>652.3</b>	<b>615</b>
<b>COSTS</b>						
Cash Costs	1,551.7	1,545.2	1,446.3	1,414.0	1,475.3	1,487
Depreciation Costs	263.2	240.7	221.6	213.6	208.6	230
Opportunity Costs	549.7	565.2	540.6	524.2	510.9	538
<b>Total Production Costs</b>	<b>2,364.6</b>	<b>2,351.0</b>	<b>2,208.4</b>	<b>2,151.8</b>	<b>2,194.9</b>	<b>2,254</b>
<b>Profits</b>						
	<b>2023</b>	<b>2022</b>	<b>2021</b>	<b>2020</b>	<b>2019</b>	<b>5-yr. avg.</b>
<b>Short-term profit (cash costs)</b>	148.6	(393.7)	(504.9)	(446.1)	(499.9)	(339)
<b>Medium-term profit (cash + depreciation)</b>	(114.6)	(634.4)	(726.5)	(659.7)	(708.5)	(569)
<b>Long-term profit (cash + depreciation + opportunity)</b>	(664.3)	(1,199.6)	(1,267.0)	(1,183.9)	(1,219.4)	(1,107)

\*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. AgriProfit\$ 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.



<b>Cow-Calf Enterprise (\$/lb Weaned)</b>	<b>2023</b>	<b>2022</b>	<b>2021</b>	<b>2020</b>	<b>2019</b>	<b>5 yr. avg.</b>
<b>Pounds Weaned</b>	15,095	15,095	15,095	15,095	15,095	15,095
Average male and female weaning weight (lbs)	517	517	517	517	517	
Average male and female calf price at weaning (\$/lb)	3.67	2.46	1.98	2.03	2.05	2.44
<b>REVENUE</b>						
Cow Calf Operation	4.17	2.82	2.31	2.37	2.39	2.81
Cull animals and slaughter receipts	0.48	0.34	0.31	0.33	0.33	0.36
Breeding livestock receipts	-	-	-	-	-	-
Calf Sales and transfer to retained ownership enterprise	3.68	2.48	2.00	2.05	2.07	2.46
Government payments	-	-	-	-	-	-
Other returns	-	-	-	-	-	-
<b>Total Cow-Calf Revenue</b>	<b>4.17</b>	<b>2.82</b>	<b>2.31</b>	<b>2.37</b>	<b>2.39</b>	<b>2.81</b>
<b>VARIABLE COSTS</b>						
Animal purchases	0.06	0.06	0.06	0.06	0.06	0.06
Feed (purchase feed, fertiliser, seed, pesticides)	1.95	1.93	1.90	1.88	1.86	1.90
Machinery (maintenance, depreciation, contractor)	0.40	0.36	0.33	0.32	0.31	0.34
Fuel, energy, lubricants, water	0.43	0.41	0.27	0.20	0.24	0.31
Vet & medicine	0.05	0.05	0.04	0.04	0.03	0.04
Other inputs cow calf enterprise	0.23	0.22	0.21	0.20	0.20	0.21
Labour						
Paid Labour	0.02	0.02	0.02	0.01	0.01	0.02
Unpaid Labour	1.15	1.19	1.13	1.09	1.06	1.13
<b>Total Variable Costs</b>	<b>4.3</b>	<b>4.2</b>	<b>4.0</b>	<b>3.8</b>	<b>3.8</b>	<b>4.0</b>
<b>CAPITAL COSTS</b>						
Insurance, taxes	0.28	0.29	0.28	0.27	0.26	0.28
Buildings (maintenance, depreciation)	0.44	0.42	0.39	0.38	0.37	0.40
Land Cost						
Rented Land	0.22	0.22	0.22	0.22	0.22	0.22
Owned Land	0.19	0.19	0.19	0.19	0.19	0.19
Capital Costs						
Liabilities	0.36	0.41	0.36	0.40	0.55	0.42
Own capital	0.00	0.00	0.00	0.00	0.00	0.00
<b>Total Capital Costs</b>	<b>1.5</b>	<b>1.5</b>	<b>1.4</b>	<b>1.5</b>	<b>1.6</b>	<b>1.5</b>
<b>COSTS</b>						
Cash Costs	3.80	3.79	3.54	3.47	3.62	3.64
Depreciation Costs	0.65	0.59	0.54	0.52	0.51	0.56
Opportunity Costs	1.35	1.39	1.32	1.28	1.25	1.32
<b>Total Production Costs</b>	<b>5.80</b>	<b>5.76</b>	<b>5.41</b>	<b>5.27</b>	<b>5.38</b>	<b>5.53</b>
<b>Profits</b>						
<b>Short-term profit (cash costs)</b>	0.36	(0.97)	(1.24)	(1.09)	(1.23)	(0.83)
<b>Medium-term profit (cash + depreciation)</b>	(0.28)	(1.55)	(1.78)	(1.62)	(1.74)	(1.39)
<b>Long-term profit (cash + depreciation + opportunity)</b>	(1.63)	(2.94)	(3.11)	(2.90)	(2.99)	(2.71)

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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.

