



<b>Farm Characteristics</b>	<b>CA-AB-6</b>
<b>Farm Description</b>	A cow-calf operation producing predominantly homegrown feed in one of the most productive agricultural regions of the prairies.
<b>Winter Feeding Ration (lbs/cow/day as fed)</b>	35 days of swath grazing followed by 117 days winter feeding with hay (28 lb), straw (11 lb), grain (2 lb), mineral and salt (100 g)
<b>Retained Ownership/Replacement Ration (lb/head/day as fed)</b>	n/a
<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	1.5°C
Average Annual Precipitation (mm)	400–500 mm
Ecoregion	Aspen Parkland
Stocking Rate (Animal Unit days per acre)	17
Fertilize Hay (yes/no)	Yes
Fertilize Pasture (yes/no)	No
Typical Hay Yield (tonnes/acre)	1.7
Grassland Acres (owned+rented)	2,370
Crop Acres (includes hay) (owned+rented)	518
Bush and other acres	0

Physical Performance Indicators	
Breed	Hereford, Angus
Cow:Bull Ratio	19:1
Bull Culling Rate (%)	4%
Mature Cow Weight (lb)	1,338
Heifer Retention for a steady herd (%)	9%
Cow Death Loss (%)	1.3%
Cow Culling Rate (%)	8.0%
Calves alive after 24hr/100 Cows exposed	96
Calf Death Loss (%) 24 hr to weaning	5%
Calves weaned per 100 cows exposed	90
Total Liveweight Sold per Cow (lb)	551
Weaning Weight (lb)	535
205 day adjusted Weaning Weight (lb)	609
Average Daily Gain pre-weaning (lb)	2.55
Weaning Weight as % of Cow Weight	40%

Production System	
Herd size	152
Days on field feeding (e.g. swath grazing)	35
Days supplemented on pasture	0
Days on full winter feed	117
Calving Start date	April 04
Weaning date	October 21
Sale date	October 21
Retained ownership	Replacements
% of feed purchased	0.5%
% of land in crops	18%
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

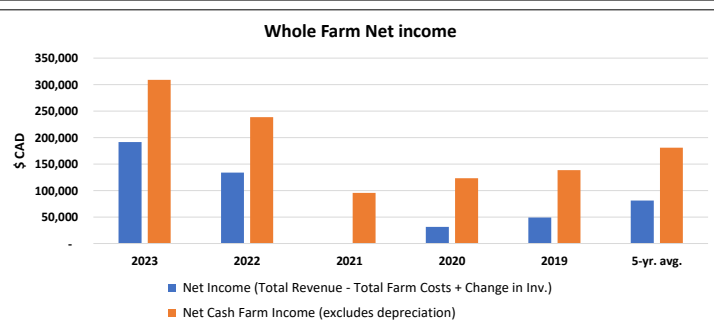
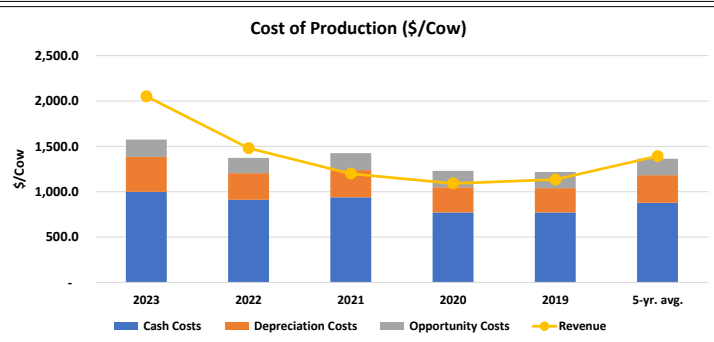
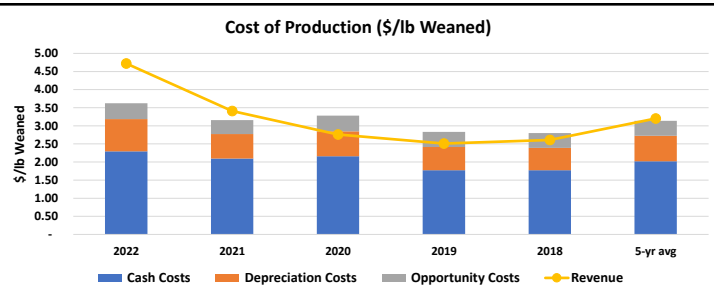
Footnotes:

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	Mature						
Herd Size	152			Beef Animals Sold from Retained Ownership		N/A	
Paid Labour (livestock only) (hours)	397						
Unpaid Labour (livestock only) (hours)	742						
Average wages - paid and unpaid (\$/hr)	12.71						
Revenue		2023	2022	2021	2020	2019	5-yr. avg.
<b>Market Revenue</b>	<b>5-yr avg</b>	<b>513,817</b>	<b>429,199</b>	<b>279,886</b>	<b>293,329</b>	<b>310,898</b>	<b>365,426</b>
Cow-Calf	49%	304,284	208,872	167,944	165,779	172,420	203,860
Cash Crops	39%	209,532	220,327	111,942	127,550	138,478	161,566
Retained Ownership	0%	-	-	-	-	-	-
<b>Government Payments</b>	<b>3%</b>	<b>13,435</b>	<b>21,947</b>	<b>20,123</b>	<b>5,835</b>	<b>5,835</b>	<b>13,435</b>
<b>Other Farm Revenue †</b>	<b>9%</b>	<b>37,415</b>	<b>37,384</b>	<b>37,368</b>	<b>37,368</b>	<b>37,370</b>	<b>37,381</b>
<b>Total Revenue</b>	<b>100%</b>	<b>564,666</b>	<b>488,529</b>	<b>337,377</b>	<b>336,532</b>	<b>354,102</b>	<b>416,241</b>
Change in Inventory		-	-	-	-	-	-
Expenses		2023	2022	2021	2020	2019	5-yr. avg.
<b>Depreciation</b>		<b>117,469</b>	<b>104,692</b>	<b>95,236</b>	<b>91,870</b>	<b>89,271</b>	<b>99,708</b>
Machinery		84,264	73,257	65,843	63,574	61,455	69,679
Buildings		33,205	31,434	29,394	28,297	27,815	30,029
Quota econ. Accounting		-	-	-	-	-	-
<b>Overhead costs</b>		<b>15,947</b>	<b>15,985</b>	<b>13,901</b>	<b>13,165</b>	<b>13,051</b>	<b>14,410</b>
Land improvement		-	-	-	-	-	-
Machinery Maintenance		2,074	1,944	1,842	1,812	1,780	1,890
Buildings Maintenance		1,181	1,074	856	827	839	955
Contract labour		527	544	483	498	483	507
Diesel, Gasoline, Natural Gas		1,659	2,269	1,474	1,136	1,240	1,556
Electricity		1,437	994	603	443	434	782
Water		-	-	-	-	-	-
Farm insurance		1,771	1,829	1,737	1,675	1,625	1,727
Disability and accident insurance		-	-	-	-	-	-
Farm taxes and duties		66	68	65	63	61	65
Advisor costs		3,769	3,893	3,696	3,565	3,459	3,676
Accountant & legal fees		-	-	-	-	-	-
Phone & utilities		2,489	2,396	2,171	2,171	2,155	2,276
Other overhead costs		975	975	975	975	975	975
<b>Wages, rent and interest payments</b>		<b>63,924</b>	<b>65,644</b>	<b>66,240</b>	<b>68,685</b>	<b>71,172</b>	<b>67,133</b>
Paid Labour		9,138	9,439	8,961	8,645	8,387	8,914
Total land rents		48,056	47,694	47,187	47,011	46,735	47,336
Total Interest on debt		6,730	8,511	10,091	13,029	16,051	10,883
<b>Cow-Calf</b>		<b>64,887</b>	<b>53,044</b>	<b>58,596</b>	<b>34,261</b>	<b>33,531</b>	<b>48,864</b>
Animal purchases		1,167	1,167	1,167	1,167	1,167	1,167
Purchased feed		30,377	18,554	29,901	7,875	7,561	18,854
Other fixed and var. costs *		33,343	33,324	27,528	25,219	24,803	28,844
<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>110,909</b>	<b>115,188</b>	<b>103,161</b>	<b>97,133</b>	<b>97,918</b>	<b>104,862</b>
Seed		26,509	23,242	23,898	21,064	22,417	23,426
Fertilizer		32,903	37,252	30,346	26,642	27,566	30,942
Herbicide		9,475	11,782	10,671	10,191	9,733	10,370
Fungicide & Insecticide		-	-	-	-	-	-
Irrigation		-	-	-	-	-	-
Contract labour		35,024	36,176	32,143	33,132	32,143	33,724
Fuel costs (crop & forage)		-	-	-	-	-	-
Other crop and forage		6,999	6,736	6,103	6,103	6,059	6,400
<b>Total Farm Costs (excludes unpaid labour)</b>		<b>373,136</b>	<b>354,553</b>	<b>337,134</b>	<b>305,114</b>	<b>304,943</b>	<b>334,976</b>
Cash Costs (Total Farm Costs - Depreciation)		255,667	249,861	241,898	213,244	215,672	235,268
Depreciation & Opportunity Costs (including unpaid labour)		126,898	114,121	104,665	101,299	98,699	109,137
Total Economic Costs (cash, depr, opportunity)		382,565	363,982	346,563	314,543	314,372	344,405
Profits		2023	2022	2021	2020	2019	5-yr. avg.
<b>Net Income (Total Revenue - Total Farm Costs + Change in Inv.)</b>		<b>191,530</b>	<b>133,976</b>	<b>242</b>	<b>31,418</b>	<b>49,160</b>	<b>81,265</b>
<b>Net Cash Farm Income (excludes depreciation)</b>		<b>308,951</b>	<b>238,650</b>	<b>95,477</b>	<b>123,287</b>	<b>138,427</b>	<b>180,958</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*	152	152	152	152	152	152
Average male and female calf price (\$/head)	2,242	1,526	1,220	1,204	1,253	1,489
<b>REVENUE</b>						
Cow Calf	2,052	1,480	1,199	1,091	1,134	1,391
Cull animals and slaughter receipts	174	129	109	109	114	127
Breeding livestock receipts	-	-	-	-	-	-
Calf Sales and transfer to retained ownership enterprise	1,828	1,245	996	982	1,021	1,214
Government payments	50.0	106.0	94.0	-	-	50.0
Other returns	-	-	-	-	-	-
<b>Total Cow-Calf Revenue</b>	<b>2,052</b>	<b>1,480</b>	<b>1,199</b>	<b>1,091</b>	<b>1,134</b>	<b>1,391</b>
<b>VARIABLE COSTS</b>						
Animal purchases	7.7	7.7	7.7	7.7	7.7	8
Feed (purchase feed, fertiliser, seed, pesticides)	282.2	208.5	272.8	119.7	120.0	201
Machinery (maintenance, depreciation, contractor)	411.4	329.5	326.0	310.0	297.9	335
Fuel, energy, lubricants, water	70.0	68.6	42.2	29.8	29.6	48
Vet & medicine	65.9	68.1	64.6	62.4	60.5	64
Other inputs cow calf enterprise	110.9	103.2	95.5	91.5	90.8	98
Labour						
Paid Labour	33.2	27.8	31.2	28.5	27.3	30
Unpaid Labour	67.8	56.8	63.8	58.2	55.8	60
<b>Total Variable Costs</b>	<b>1,049.1</b>	<b>870.0</b>	<b>903.7</b>	<b>707.9</b>	<b>689.5</b>	<b>844</b>
<b>CAPITAL COSTS</b>						
Insurance, taxes	16.9	16.2	16.3	15.4	14.9	16
Buildings (maintenance, depreciation)	74.3	64.6	64.2	60.5	59.2	65
Land Cost	-	-	-	-	-	-
Rented Land	287.0	284.7	281.8	280.7	279.1	283
Own Land	48.8	46.8	44.0	43.0	41.5	45
Capital Costs	-	-	-	-	-	-
Liabilities	24.5	25.8	35.9	43.0	52.3	36
Own capital	74.2	64.0	80.0	80.3	80.8	76
<b>Total Capital Costs</b>	<b>525.6</b>	<b>502.1</b>	<b>522.2</b>	<b>522.9</b>	<b>527.7</b>	<b>520</b>
<b>COSTS</b>						
Cash Costs	997.4	910.3	937.9	770.7	771.3	878
Depreciation Costs	386.5	294.3	300.2	278.6	267.9	306
Opportunity Costs	190.8	167.6	187.8	181.5	178.1	181
<b>Total Production Costs</b>	<b>1,574.7</b>	<b>1,372.2</b>	<b>1,425.9</b>	<b>1,230.8</b>	<b>1,217.3</b>	<b>1,364</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>	1,054.4	569.9	261.0	320.0	363.1	514
<b>Medium-term profit (cash + depreciation)</b>	667.9	275.6	(39.2)	41.4	95.2	208
<b>Long-term profit (cash + depreciation + opportunity)</b>	477.1	108.0	(227.0)	(140.1)	(82.9)	27

\*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>	66,039	66,039	66,039	66,039	66,039	66,039
Average male and female weaning weight (lbs)	535	535	535	535	535	
Average male and female calf price at weaning (\$/lb)	4.19	2.85	2.28	2.25	2.34	2.78
<b>REVENUE</b>						
Cow Calf Operation	4.72	3.41	2.76	2.51	2.61	3.20
Cull animals and slaughter receipts	0.40	0.30	0.25	0.25	0.26	0.29
Breeding livestock receipts	-	-	-	-	-	-
Calf Sales and transfer to retained ownership enterprise	4.21	2.87	2.29	2.26	2.35	2.79
Government payments	0.12	0.24	0.22	-	-	0.12
Other returns	-	-	-	-	-	-
<b>Total Cow-Calf Revenue</b>	<b>4.72</b>	<b>3.41</b>	<b>2.76</b>	<b>2.51</b>	<b>2.61</b>	<b>3.20</b>
<b>VARIABLE COSTS</b>						
Animal purchases	0.02	0.02	0.02	0.02	0.02	0.02
Feed (purchase feed, fertiliser, seed, pesticides)	0.65	0.48	0.63	0.28	0.28	0.46
Machinery (maintenance, depreciation, contractor)	0.95	0.76	0.75	0.71	0.69	0.77
Fuel, energy, lubricants, water	0.16	0.16	0.10	0.07	0.07	0.11
Vet & medicine	0.15	0.16	0.15	0.14	0.14	0.15
Other inputs cow calf enterprise	0.26	0.24	0.22	0.21	0.21	0.23
Labour						
Paid Labour	0.08	0.06	0.07	0.07	0.06	0.07
Unpaid Labour	0.16	0.13	0.15	0.13	0.13	0.14
<b>Total Variable Costs</b>	<b>2.4</b>	<b>2.0</b>	<b>2.1</b>	<b>1.6</b>	<b>1.6</b>	<b>1.9</b>
<b>CAPITAL COSTS</b>						
Insurance, taxes	0.04	0.04	0.04	0.04	0.03	0.04
Buildings (maintenance, depreciation)	0.17	0.15	0.15	0.14	0.14	0.15
Land Cost						
Rented Land	0.66	0.66	0.65	0.65	0.64	0.65
Owned Land	0.11	0.11	0.10	0.10	0.10	0.10
Capital Costs						
Liabilities	0.06	0.06	0.08	0.10	0.12	0.08
Own capital	0.17	0.15	0.18	0.18	0.19	0.17
<b>Total Capital Costs</b>	<b>1.2</b>	<b>1.2</b>	<b>1.2</b>	<b>1.2</b>	<b>1.2</b>	<b>1.2</b>
<b>COSTS</b>						
Cash Costs	2.30	2.10	2.16	1.77	1.78	2.02
Depreciation Costs	0.89	0.68	0.69	0.64	0.62	0.70
Opportunity Costs	0.44	0.39	0.43	0.42	0.41	0.42
<b>Total Production Costs</b>	<b>3.62</b>	<b>3.16</b>	<b>3.28</b>	<b>2.83</b>	<b>2.80</b>	<b>3.14</b>
<b>Profits</b>						
<b>Short-term profit (cash costs)</b>	<b>2.43</b>	<b>1.31</b>	<b>0.60</b>	<b>0.74</b>	<b>0.84</b>	<b>1.18</b>
<b>Medium-term profit (cash + depreciation)</b>	<b>1.54</b>	<b>0.63</b>	<b>(0.09)</b>	<b>0.10</b>	<b>0.22</b>	<b>0.48</b>
<b>Long-term profit (cash + depreciation + opportunity)</b>	<b>1.10</b>	<b>0.25</b>	<b>(0.52)</b>	<b>(0.32)</b>	<b>(0.19)</b>	<b>0.06</b>

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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

Open 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.

