



Farm Characteristics	CA-AB-13
Farm Description	A cow-calf operation with 155 head of beef cows, producing predominantly homegrown feed, sell at weaning.
Winter Feeding Ration (lbs/cow/day as fed)	60 days of swath grazing followed by 182 days on hay (34 lb) and greenfeed (7 lb)
Retained Ownership/Replacement Ration (lb/head/day as fed)	Replacements heifers: 203 days on hay (22 lb) and greenfeed (2.5 lb)
Disclaimer:	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 to 2° C
Average Annual Precipitation (mm)	450-600
	Western Alberta
Ecoregion	Upland
Stocking Rate (Animal Unit days per acre)	28
Fertilize Hay (yes/no)	No
Fertilize Pasture (yes/no)	No
Typical Hay Yield (tonnes/acre)	1.1
Grassland Acres (owned+rented)	1,111
Crop Acres (includes hay) (owned+rented)	719
Bush and other acres	0

Physical Performance Indicators	
Breed	Angus, Simmental
Cow:Bull Ratio	19:1
Bull Culling Rate (%)	13%
Mature Cow Weight (lb)	1,400
Heifer Retention for a steady herd (%)	5%
Cow Death Loss (%)	0.3%
Cow Culling Rate (%)	5.0%
Calves alive after 24hr/100 Cows exposed	93
Calf Death Loss (%) 24 hr to weaning	4%
Calves weaned per 100 cows exposed	89
Total Liveweight Sold per Cow (lb)	578
Weaning Weight (lb)	603
205 day adjusted Weaning Weight (lb)	581
Average Daily Gain pre-weaning (lb)	2.42
Weaning Weight as % of Cow Weight	43%

Production System	
Herd size	155
Days on field feeding (e.g. swath grazing)	60
Days supplemented on pasture	0
Days on full winter feed	182
Calving Start date	March 18
Weaning date	November 02
Sale date	November 02
Retained ownership	Replacements
% of feed purchased	0.6%
% of land in crops	39%
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

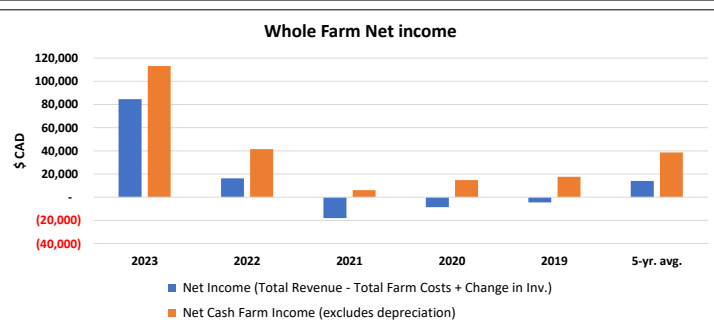
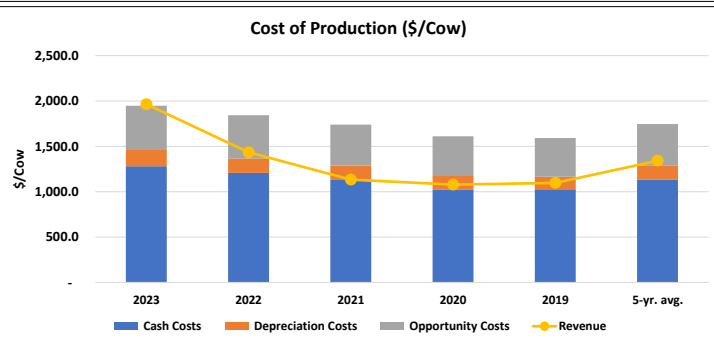
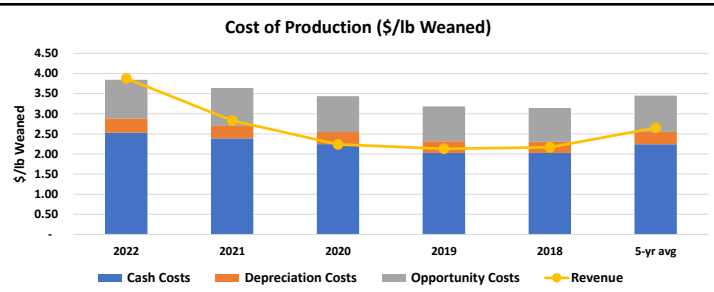
Footnotes:

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	155		Beef Animals Sold from Retained Ownership		N/A		
Paid Labour (livestock only) (hours)	73						
Unpaid Labour (livestock only) (hours)	2,530						
Average wages - paid and unpaid (\$/hr)	15.28						
Revenue		2023	2022	2021	2020	2019	5-yr. avg.
Market Revenue	5-yr avg	296,725	205,926	161,170	167,129	170,084	200,207
Cow-Calf	92%	296,725	205,926	161,170	167,129	170,084	200,207
Cash Crops	0%	-	-	-	-	-	-
Retained Ownership	0%	-	-	-	-	-	-
Government Payments	4%	7,750	16,430	14,570	-	-	7,750
Other Farm Revenue †	5%	10,085	10,074	10,074	10,074	10,074	10,076
Total Revenue	100%	314,560	232,430	185,814	177,202	180,157	218,033
Change in Inventory		-	-	-	-	-	-
Expenses		2023	2022	2021	2020	2019	5-yr. avg.
Depreciation		28,551	25,123	24,145	23,327	22,115	24,652
Machinery		24,657	21,437	20,698	20,008	18,852	21,130
Buildings		3,894	3,686	3,447	3,319	3,262	3,522
Quota econ. Accounting		-	-	-	-	-	-
Overhead costs		68,946	64,480	55,028	51,620	51,649	58,344
Land improvement		12,409	11,454	10,336	10,336	10,336	10,974
Machinery Maintenance		9,573	8,974	8,502	8,363	8,219	8,726
Buildings Maintenance		5,196	4,723	4,050	3,810	3,864	4,329
Contract labour		1,413	1,459	1,386	1,386	1,386	1,406
Diesel, Gasoline, Natural Gas		6,346	7,784	5,421	4,449	5,078	5,816
Electricity		13,912	9,622	5,840	4,294	4,201	7,574
Water		-	-	-	-	-	-
Farm insurance		5,839	6,031	5,726	5,524	5,359	5,696
Disability and accident insurance		3,406	3,519	3,340	3,222	3,126	3,323
Farm taxes and duties		4,693	4,847	4,602	4,439	4,307	4,577
Advisor costs		841	868	824	795	771	820
Accountant & legal fees		-	-	-	-	-	-
Phone & utilities		3,218	3,097	2,901	2,901	2,901	3,004
Other overhead costs		2,101	2,101	2,101	2,101	2,101	2,101
Wages, rent and interest payments		65,755	69,563	64,309	62,071	62,456	64,831
Paid Labour		1,211	1,250	1,187	1,145	1,111	1,181
Total land rents		39,233	38,297	36,987	36,531	35,816	37,373
Total Interest on debt		25,311	30,016	26,135	24,395	25,529	26,277
Cow-Calf		36,052	26,528	32,571	22,238	21,173	27,713
Animal purchases		4,250	4,250	4,250	4,250	4,250	4,250
Purchased feed		19,482	9,510	16,763	6,916	5,876	11,709
Other fixed and var. costs *		12,321	12,769	11,558	11,072	11,047	11,753
Retained Ownership		-	-	-	-	-	-
Animal purchases		-	-	-	-	-	-
Purchased feed		-	-	-	-	-	-
Other fixed and var. costs *		-	-	-	-	-	-
Crop and forage		30,641	30,456	27,873	26,515	27,288	28,555
Seed		12,770	11,197	10,598	10,147	10,799	11,102
Fertilizer		10,346	11,241	9,781	8,964	9,170	9,900
Herbicide		1,773	2,204	1,996	1,907	1,821	1,940
Fungicide & Insecticide		-	-	-	-	-	-
Irrigation		-	-	-	-	-	-
Contract labour		3,954	4,085	3,878	3,878	3,878	3,935
Fuel costs (crop & forage)		-	-	-	-	-	-
Other crop and forage		1,797	1,730	1,620	1,620	1,620	1,677
Total Farm Costs (excludes unpaid labour)		229,946	216,150	203,926	185,771	184,681	204,095
Cash Costs (Total Farm Costs - Depreciation)		201,394	191,027	179,781	162,444	162,566	179,442
Depreciation & Opportunity Costs (including unpaid labour)		67,204	63,776	62,798	61,979	60,767	63,305
Total Economic Costs (cash, depr, opportunity)		268,598	254,803	242,579	224,424	223,333	242,747
Profits		2023	2022	2021	2020	2019	5-yr. avg.
Net Income (Total Revenue - Total Farm Costs + Change in Inv.)		84,614	16,280	(18,112)	(8,569)	(4,523)	13,938
Net Cash Farm Income (excludes depreciation)		113,154	41,403	6,033	14,758	17,591	38,588

† 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)	2023	2022	2021	2020	2019	5 yr. avg.
No. of Cows*	155	155	155	155	155	155
Average male and female calf price (\$/head)	2,153	1,487	1,158	1,205	1,224	1,445
REVENUE						
Cow Calf	1,964	1,435	1,134	1,078	1,097	1,342
Cull animals and slaughter receipts	98	73	62	62	64	72
Breeding livestock receipts	-	-	-	-	-	-
Calf Sales and transfer to retained ownership enterprise	1,816	1,256	978	1,016	1,033	1,220
Government payments	50.0	106.0	94.0	-	-	50.0
Other returns	-	-	-	-	-	-
Total Cow-Calf Revenue	1,964	1,435	1,134	1,078	1,097	1,342
VARIABLE COSTS						
Animal purchases	27.4	27.4	27.4	27.4	27.4	27
Feed (purchase feed, fertiliser, seed, pesticides)	377.9	305.4	329.6	257.4	255.6	305
Machinery (maintenance, depreciation, contractor)	255.5	232.0	222.3	217.0	208.6	227
Fuel, energy, lubricants, water	126.4	107.1	68.4	53.2	56.5	82
Vet & medicine	30.5	31.5	29.9	28.9	28.0	30
Other inputs cow calf enterprise	87.4	88.2	80.0	77.8	78.4	82
Labour						
Paid Labour	7.6	7.7	7.2	7.0	6.8	7
Unpaid Labour	242.4	246.8	231.3	223.6	217.1	232
Total Variable Costs	1,155.1	1,046.0	996.2	892.2	878.5	994
CAPITAL COSTS						
Insurance, taxes	88.0	90.0	84.7	81.9	79.5	85
Buildings (maintenance, depreciation)	48.7	45.0	40.1	38.2	38.2	42
Land Cost	-	-	-	-	-	-
Rented Land	253.1	247.1	238.6	235.7	231.1	241
Own Land	229.3	222.8	213.7	210.5	205.5	216
Capital Costs	-	-	-	-	-	-
Liabilities	158.1	185.3	159.5	148.4	155.5	161
Own capital	14.7	7.3	6.8	4.7	3.3	7
Total Capital Costs	791.9	797.5	743.5	719.4	713.0	753
COSTS						
Cash Costs	1,280.6	1,208.5	1,135.9	1,025.9	1,026.5	1,135
Depreciation Costs	179.9	158.0	152.0	146.9	139.1	155
Opportunity Costs	486.4	476.9	451.8	438.8	426.0	456
Total Production Costs	1,946.9	1,843.5	1,739.7	1,611.6	1,591.5	1,747
Profits						
	2023	2022	2021	2020	2019	5-yr. avg.
Short-term profit (cash costs)	683.8	226.0	(2.1)	52.3	70.8	206
Medium-term profit (cash + depreciation)	503.8	68.0	(154.1)	(94.5)	(68.3)	51
Long-term profit (cash + depreciation + opportunity)	17.4	(408.9)	(605.9)	(533.3)	(494.2)	(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\$.

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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)	2023	2022	2021	2020	2019	5 yr. avg.
Pounds Weaned	78,486	78,486	78,486	78,486	78,486	78,486
Average male and female weaning weight (lbs)	603	603	603	603	603	
Average male and female calf price at weaning (\$/lb)	3.57	2.47	1.92	2.00	2.03	2.40
REVENUE						
Cow Calf Operation	3.88	2.83	2.24	2.13	2.17	2.65
Cull animals and slaughter receipts	0.19	0.14	0.12	0.12	0.13	0.14
Breeding livestock receipts	-	-	-	-	-	-
Calf Sales and transfer to retained ownership enterprise	3.59	2.48	1.93	2.01	2.04	2.41
Government payments	0.10	0.21	0.19	-	-	0.10
Other returns	-	-	-	-	-	-
Total Cow-Calf Revenue	3.88	2.83	2.24	2.13	2.17	2.65
VARIABLE COSTS						
Animal purchases	0.05	0.05	0.05	0.05	0.05	0.05
Feed (purchase feed, fertiliser, seed, pesticides)	0.75	0.60	0.65	0.51	0.50	0.60
Machinery (maintenance, depreciation, contractor)	0.50	0.46	0.44	0.43	0.41	0.45
Fuel, energy, lubricants, water	0.25	0.21	0.14	0.11	0.11	0.16
Vet & medicine	0.06	0.06	0.06	0.06	0.06	0.06
Other inputs cow calf enterprise	0.17	0.17	0.16	0.15	0.15	0.16
Labour						
Paid Labour	0.01	0.02	0.01	0.01	0.01	0.01
Unpaid Labour	0.48	0.49	0.46	0.44	0.43	0.46
Total Variable Costs	2.3	2.1	2.0	1.8	1.7	2.0
CAPITAL COSTS						
Insurance, taxes	0.17	0.18	0.17	0.16	0.16	0.17
Buildings (maintenance, depreciation)	0.10	0.09	0.08	0.08	0.08	0.08
Land Cost						
Rented Land	0.50	0.49	0.47	0.47	0.46	0.48
Owned Land	0.45	0.44	0.42	0.42	0.41	0.43
Capital Costs						
Liabilities	0.31	0.37	0.31	0.29	0.31	0.32
Own capital	0.03	0.01	0.01	0.01	0.01	0.01
Total Capital Costs	1.6	1.6	1.5	1.4	1.4	1.5
COSTS						
Cash Costs	2.53	2.39	2.24	2.03	2.03	2.24
Depreciation Costs	0.36	0.31	0.30	0.29	0.27	0.31
Opportunity Costs	0.96	0.94	0.89	0.87	0.84	0.90
Total Production Costs	3.84	3.64	3.44	3.18	3.14	3.45
Profits	2023	2022	2021	2020	2019	5-yr. avg.
Short-term profit (cash costs)	1.35	0.45	(0.00)	0.10	0.14	0.41
Medium-term profit (cash + depreciation)	1.00	0.13	(0.30)	(0.19)	(0.13)	0.10
Long-term profit (cash + depreciation + opportunity)	0.03	(0.81)	(1.20)	(1.05)	(0.98)	(0.80)

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