



Farm Characteristics	LL_04
Farm Description	A mixed cow-calf and cash crop operation with 240 cows, utilizing mostly homegrown feed.
Winter Feeding Ration (lbs/cow/day as fed)	197 days on hay (20 lb) and silage (49 lb)
Retained Ownership/Replacement Ration (lb/head/day as fed)	Replacements: 216 days on hay (12 lb), silage (29 lb) and grain (2 lb)

Disclaimer: This benchmark is based on 4 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.

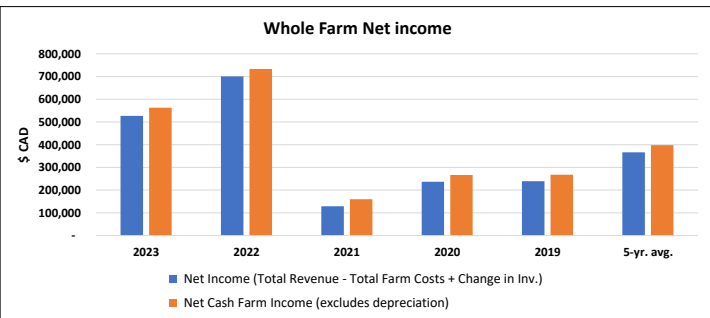
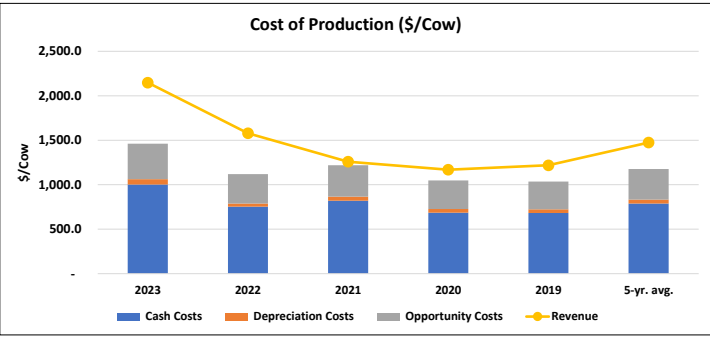
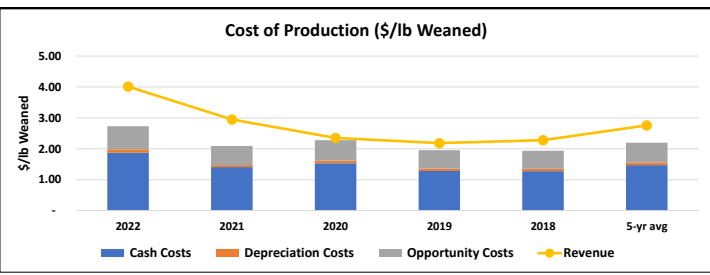
Environment	
Average Annual Temperature	1.5° C
Average Annual Precipitation (mm)	400-500
Ecoregion	Aspen Parkland
Stocking Rate (Animal Unit days per acre)	35
Fertilize Hay (yes/no)	Yes
Fertilize Pasture (yes/no)	No
Typical Hay Yield (tonnes/acre)	1.5
Grassland Acres (owned+rented)	1,940
Crop Acres (includes hay) (owned+rented)	2,461
Bush and other acres	0

Physical Performance Indicators	
Breed	Angus, Simmental, Hereford, Limousin
Cow:Bull Ratio	24:1
Bull Culling Rate (%)	10%
Mature Cow Weight (lb)	1,488
Heifer Retention for a steady herd (%)	9%
Cow Death Loss (%)	0.9%
Cow Culling Rate (%)	8.5%
Calves alive after 24hr/100 Cows exposed	93
Calf Death Loss (%) 24 hr to weaning	2%
Calves weaned per 100 cows exposed	91
Total Liveweight Sold per Cow (lb)	642
Weaning Weight (lb)	648
205 day adjusted Weaning Weight (lb)	578
Average Daily Gain pre-weaning (lb)	2.41
Weaning Weight as % of Cow Weight	44%

Production System	
Herd size	240
Days on field feeding (e.g. swath grazing)	0
Days supplemented on pasture	0
Days on full winter feed	197
Calving Start date	February 27
Weaning date	November 02
Sale date	November 02
Retained ownership	Replacements
% of feed purchased	0.7%
% of land in crops	56%
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, fertilizer, 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	Medium						
Herd Size	240			Beef Animals Sold from Retained Ownership	N/A		
Paid Labour (livestock only) (hours)	-						
Unpaid Labour (livestock only) (hours)	2,306						
Average wages - paid and unpaid (\$/hr)	11.74						
Revenue		2023	2022	2021	2020	2019	5-yr. avg.
Market Revenue	5-yr avg	1,283,319	1,426,474	788,074	857,428	860,684	1,043,196
Cow-Calf	32%	504,209	353,549	279,672	280,526	292,536	342,098
Cash Crops	66%	779,111	1,072,925	508,403	576,902	568,148	701,098
Retained Ownership	0%	-	-	-	-	-	-
Government Payments	1%	11,280	25,440	22,560	-	-	11,856
Other Farm Revenue †	0%	525	55	146	219	432	276
Total Revenue	100%	1,295,124	1,451,969	810,781	857,647	861,115	1,055,327
Change in Inventory		-	-	-	-	-	-
Expenses		2023	2022	2021	2020	2019	5-yr. avg.
Depreciation		36,815	32,892	31,428	30,340	28,986	32,092
Machinery		25,354	22,042	21,283	20,574	19,385	21,728
Buildings		11,461	10,849	10,145	9,766	9,600	10,364
Quota econ. Accounting		-	-	-	-	-	-
Overhead costs		200,006	190,935	166,805	156,820	157,314	174,376
Land improvement		8,022	7,404	6,682	6,436	6,419	6,993
Machinery Maintenance		81,982	76,853	72,813	71,624	70,385	74,732
Buildings Maintenance		35,351	32,136	27,553	25,923	26,293	29,451
Contract labour		-	-	-	-	-	-
Diesel, Gasoline, Natural Gas		23,660	28,559	20,528	16,748	19,042	21,707
Electricity		18,380	12,712	7,715	5,673	5,551	10,006
Water		-	-	-	-	-	-
Farm insurance		17,502	18,077	17,163	16,556	16,062	17,072
Disability and accident insurance		-	-	-	-	-	-
Farm taxes and duties		9,238	9,542	9,059	8,739	8,478	9,011
Advisor costs		-	-	-	-	-	-
Accountant & legal fees		-	-	-	-	-	-
Phone & utilities		5,872	5,651	5,292	5,120	5,083	5,404
Other overhead costs		-	-	-	-	-	-
Wages, rent and interest payments		71,937	77,397	65,722	57,809	54,991	65,571
Paid Labour		-	-	-	-	-	-
Total land rents		53,873	51,282	47,658	43,544	41,564	47,584
Total interest on debt		18,064	26,115	18,064	14,265	13,427	17,987
Cow-Calf		68,135	39,690	51,995	34,243	32,485	45,310
Animal purchases		6,750	6,750	6,750	6,750	6,750	6,750
Purchased feed		43,872	15,004	28,354	11,179	9,644	21,611
Other fixed and var. costs *		17,513	17,936	16,891	16,314	16,091	16,949
Retained Ownership		-	-	-	-	-	-
Animal purchases		-	-	-	-	-	-
Purchased feed		-	-	-	-	-	-
Other fixed and var. costs *		-	-	-	-	-	-
Crop and forage		391,502	410,913	366,050	341,656	348,158	371,656
Seed		79,577	69,771	66,040	63,233	67,294	69,183
Fertilizer		195,097	211,960	184,429	169,022	172,923	186,686
Herbicide		39,616	49,262	44,616	42,612	40,695	43,360
Fungicide & Insecticide		-	-	-	-	-	-
Irrigation		-	-	-	-	-	-
Contract labour		25,807	26,656	25,307	24,413	23,684	25,173
Fuel costs (crop & forage)		14,342	17,594	12,251	10,055	11,477	13,144
Other crop and forage		37,063	35,671	33,406	32,321	32,085	34,109
Total Farm Costs (excludes unpaid labour)		768,394	751,828	681,999	620,868	621,933	689,005
Cash Costs (Total Farm Costs - Depreciation)		731,579	718,936	650,571	590,528	592,948	656,912
Depreciation & Opportunity Costs (including unpaid labour)		63,880	59,957	58,493	57,406	56,051	59,158
Total Economic Costs (cash, depr, opportunity)		795,460	778,893	709,065	647,933	648,999	716,070
Profits		2023	2022	2021	2020	2019	5-yr. avg.
Net Income (Total Revenue - Total Farm Costs + Change in Inv.)		526,730	700,141	128,781	236,779	239,182	366,323
Net Cash Farm Income (excludes depreciation)		563,020	732,978	160,063	266,900	267,736	398,139

† 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*	240	240	240	240	240	240
Average male and female calf price (\$/head)	2,362	1,652	1,303	1,308	1,362	1,597
REVENUE						
Cow Calf	2,148	1,579	1,259	1,169	1,219	1,475
Cull animals and slaughter receipts	126	92	78	78	82	91
Breeding livestock receipts	-	-	-	-	-	-
Calf Sales and transfer to retained ownership enterprise	1,975	1,381	1,087	1,091	1,137	1,334
Government payments	47.0	106.0	94.0	-	-	49.4
Other returns	-	-	-	-	-	-
Total Cow-Calf Revenue	2,148	1,579	1,259	1,169	1,219	1,475
VARIABLE COSTS						
Animal purchases	28.1	28.1	28.1	28.1	28.1	28
Feed (purchase feed, fertiliser, seed, pesticides)	353.0	228.6	269.2	189.3	186.4	245
Machinery (maintenance, depreciation, contractor)	236.3	164.7	198.5	183.0	182.7	193
Fuel, energy, lubricants, water	68.8	42.6	41.8	30.6	34.8	44
Vet & medicine	38.6	39.8	37.8	36.5	35.4	38
Other inputs cow calf enterprise	44.0	40.7	40.4	38.5	38.8	40
Labour						
Paid Labour	-	-	-	-	-	-
Unpaid Labour	133.2	86.8	118.0	105.0	105.8	110
Total Variable Costs	902.0	631.4	733.8	610.8	612.1	698
CAPITAL COSTS						
Insurance, taxes	51.8	42.5	48.0	44.4	44.0	46
Buildings (maintenance, depreciation)	76.6	44.4	55.7	48.7	50.8	55
Land Cost	-	-	-	-	-	-
Rented Land	134.7	128.3	119.2	108.9	103.9	119
Own Land	244.9	232.8	215.8	198.4	189.1	216
Capital Costs	-	-	-	-	-	-
Liabilities	30.0	28.4	28.1	19.4	19.0	25
Own capital	21.1	11.5	19.0	16.9	17.0	17
Total Capital Costs	559.2	487.9	485.9	436.7	423.9	479
COSTS						
Cash Costs	1,001.6	754.2	820.3	685.9	683.0	789
Depreciation Costs	60.3	34.0	46.5	41.4	41.0	45
Opportunity Costs	399.3	331.2	352.8	320.2	311.9	343
Total Production Costs	1,461.2	1,119.3	1,219.6	1,047.5	1,036.0	1,177
Profits	2023	2022	2021	2020	2019	5-yr. avg.
Short-term profit (cash costs)	1,146.3	824.9	439.0	482.9	535.9	686
Medium-term profit (cash + depreciation)	1,086.0	790.9	392.5	441.6	494.8	641
Long-term profit (cash + depreciation + opportunity)	686.7	459.8	39.7	121.3	182.9	298

*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	128,453	128,453	128,453	128,453	128,453	128,453
Average male and female weaning weight (lbs)	648	648	648	648	648	
Average male and female calf price at weaning (\$/lb)	3.65	2.55	2.01	2.02	2.10	2.47
REVENUE						
Cow Calf Operation	4.01	2.95	2.35	2.18	2.28	2.76
Cull animals and slaughter receipts	0.24	0.17	0.15	0.14	0.15	0.17
Breeding livestock receipts	-	-	-	-	-	-
Calf Sales and transfer to retained ownership enterprise	3.69	2.58	2.03	2.04	2.12	2.49
Government payments	0.09	0.20	0.18	-	-	0.09
Other returns	-	-	-	-	-	-
Total Cow-Calf Revenue	4.01	2.95	2.35	2.18	2.28	2.76
VARIABLE COSTS						
Animal purchases	0.05	0.05	0.05	0.05	0.05	0.05
Feed (purchase feed, fertiliser, seed, pesticides)	0.66	0.43	0.50	0.35	0.35	0.46
Machinery (maintenance, depreciation, contractor)	0.44	0.31	0.37	0.34	0.34	0.36
Fuel, energy, lubricants, water	0.13	0.08	0.08	0.06	0.07	0.08
Vet & medicine	0.07	0.07	0.07	0.07	0.07	0.07
Other inputs cow calf enterprise	0.08	0.08	0.08	0.07	0.07	0.08
Labour						
Paid Labour	-	-	-	-	-	-
Unpaid Labour	0.25	0.16	0.22	0.20	0.20	0.21
Total Variable Costs	1.7	1.2	1.4	1.1	1.1	1.3
CAPITAL COSTS						
Insurance, taxes	0.10	0.08	0.09	0.08	0.08	0.09
Buildings (maintenance, depreciation)	0.14	0.08	0.10	0.09	0.09	0.10
Land Cost						
Rented Land	0.25	0.24	0.22	0.20	0.19	0.22
Owned Land	0.46	0.43	0.40	0.37	0.35	0.40
Capital Costs						
Liabilities	0.06	0.05	0.05	0.04	0.04	0.05
Own capital	0.04	0.02	0.04	0.03	0.03	0.03
Total Capital Costs	1.0	0.9	0.9	0.8	0.8	0.9
COSTS						
Cash Costs	1.87	1.41	1.53	1.28	1.28	1.47
Depreciation Costs	0.11	0.06	0.09	0.08	0.08	0.08
Opportunity Costs	0.75	0.62	0.66	0.60	0.58	0.64
Total Production Costs	2.73	2.09	2.28	1.96	1.94	2.20
Profits						
Short-term profit (cash costs)	2.14	1.54	0.82	0.90	1.00	1.28
Medium-term profit (cash + depreciation)	2.03	1.48	0.73	0.83	0.92	1.20
Long-term profit (cash + depreciation + opportunity)	1.28	0.86	0.07	0.23	0.34	0.56

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