



Farm Characteristics	LL_02
Farm Description	A cow-calf operation with 146 cows, utilizing both homegrown and purchased feed.
Winter Feeding Ration (lbs/cow/day as fed)	230 days on greenfeed (19 lb), hay (12 lb) and straw (5 lb)
Retained Ownership/Replacement Ration (lb/head/day as fed)	Replacements: 222 days on hay (20 lb)

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.

Disclaimer:

Environment	
Average Annual Temperature	3.5° C
Average Annual Precipitation (mm)	250-350
Ecoregion	Mixed Grassland
Stocking Rate (Animal Unit days per acre)	32
Fertilize Hay (yes/no)	No
Fertilize Pasture (yes/no)	No
Typical Hay Yield (tonnes/acre)	0.9
Grassland Acres (owned+rented)	991
Crop Acres (includes hay) (owned+rented)	440
Bush and other acres	0

Physical Performance Indicators	
	Simmental, Hereford, Angus, Charlais
Breed	
Cow:Bull Ratio	23:1
Bull Culling Rate (%)	17%
Mature Cow Weight (lb)	1,370
Heifer Retention for a steady herd (%)	10%
Cow Death Loss (%)	1.5%
Cow Culling Rate (%)	9.0%
Calves alive after 24hr/100 Cows exposed	91
Calf Death Loss (%) 24 hr to weaning	2%
Calves weaned per 100 cows exposed	88
Total Liveweight Sold per Cow (lb)	592
Weaning Weight (lb)	578
205 day adjusted Weaning Weight (lb)	528
Average Daily Gain pre-weaning (lb)	2.16
Weaning Weight as % of Cow Weight	42%

Production System	
Herd size	146
Days on field feeding (e.g. swath grazing)	0
Days supplemented on pasture	0
Days on full winter feed	222
Calving Start date	March 02
Weaning date	October 31
Sale date	October 31
Retained ownership	Replacements
% of feed purchased	28.2%
% of land in crops	31%
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)

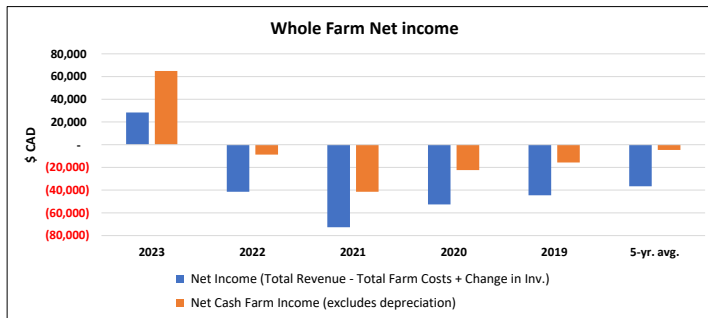
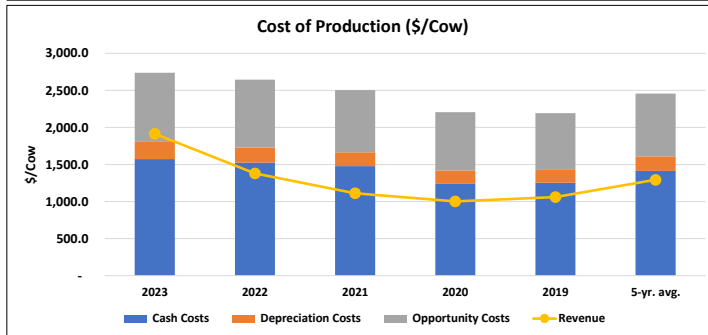
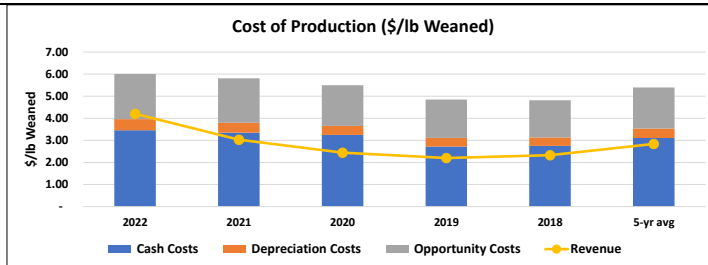
Depreciation = Linear depreciation on machinery and buildings, calculated on replacement values

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



Whole Farm Overview Page

Overview							
Operation Maturity	Mature						
Herd Size	146			Beef Animals Sold from Retained Ownership	N/A		
Paid Labour (livestock only) (hours)	-						
Unpaid Labour (livestock only) (hours)	3,362						
Average wages - paid and unpaid (\$/hr)	26.62						
Revenue		2023	2022	2021	2020	2019	5-yr. avg.
Market Revenue	5-yr avg	265,744	185,922	148,581	146,301	154,915	180,293
Cow-Calf	86%	265,744	185,922	148,581	146,301	154,915	180,293
Cash Crops	0%	-	-	-	-	-	-
Retained Ownership	0%	-	-	-	-	-	-
Government Payments	4%	13,724	15,476	13,724	-	-	8,585
Other Farm Revenue †	10%	21,908	21,907	21,907	21,907	21,907	21,907
Total Revenue	100%	301,376	223,306	184,212	168,208	176,822	210,785
Change in Inventory		-	-	-	-	-	-
Expenses		2023	2022	2021	2020	2019	5-yr. avg.
Depreciation		36,518	32,800	31,277	30,187	28,916	31,939
Machinery		22,908	19,916	19,230	18,589	17,515	19,632
Buildings		13,610	12,884	12,047	11,598	11,400	12,308
Quota econ. Accounting		-	-	-	-	-	-
Overhead costs		82,462	79,377	68,282	63,425	63,161	71,342
Land improvement		9,362	8,642	7,798	7,512	7,492	8,161
Machinery Maintenance		9,265	8,685	8,229	8,094	7,954	8,446
Buildings Maintenance		4,306	3,914	3,356	3,157	3,203	3,587
Contract labour		10,038	10,368	9,844	9,496	9,212	9,792
Diesel, Gasoline, Natural Gas		9,127	11,196	7,796	6,398	7,304	8,364
Electricity		14,482	10,016	6,079	4,470	4,373	7,884
Water		-	-	-	-	-	-
Farm insurance		14,995	15,488	14,705	14,185	13,762	14,627
Disability and accident insurance		-	-	-	-	-	-
Farm taxes and duties		5,912	6,106	5,797	5,592	5,426	5,767
Advisor costs		1,102	1,138	1,081	1,042	1,011	1,075
Accountant & legal fees		1,349	1,393	1,323	1,276	1,238	1,316
Phone & utilities		2,206	2,123	1,988	1,924	1,910	2,030
Other overhead costs		319	307	287	278	276	293
Wages, rent and interest payments		56,176	55,384	54,073	49,141	50,830	53,121
Paid Labour		-	-	-	-	-	-
Total land rents		32,525	31,710	30,571	25,380	24,758	28,989
Total interest on debt		23,651	23,674	23,501	23,761	26,072	24,132
Cow-Calf		60,251	58,827	68,019	44,582	44,687	55,273
Animal purchases		6,708	6,708	6,708	6,708	6,708	6,708
Purchased feed		43,347	41,787	51,536	28,433	28,671	38,755
Other fixed and var. costs *		10,195	10,332	9,774	9,441	9,308	9,810
Retained Ownership		-	-	-	-	-	-
Animal purchases		-	-	-	-	-	-
Purchased feed		-	-	-	-	-	-
Other fixed and var. costs *		-	-	-	-	-	-
Crop and forage		37,629	38,383	35,259	33,414	33,779	35,693
Seed		12,796	11,219	10,619	10,168	10,821	11,125
Fertilizer		10,378	11,275	9,811	8,991	9,199	9,931
Herbicide		4,650	5,782	5,237	5,002	4,777	5,089
Fungicide & Insecticide		-	-	-	-	-	-
Irrigation		-	-	-	-	-	-
Contract labour		9,517	9,830	9,332	9,003	8,734	9,283
Fuel costs (crop & forage)		-	-	-	-	-	-
Other crop and forage		288	277	260	251	249	265
Total Farm Costs (excludes unpaid labour)		273,035	264,772	256,910	220,749	221,373	247,368
Cash Costs (Total Farm Costs - Depreciation)		236,517	231,972	225,632	190,563	192,457	215,428
Depreciation & Opportunity Costs (including unpaid labour)		126,036	122,317	120,795	119,704	118,433	121,457
Total Economic Costs (cash, depr, opportunity)		362,553	354,289	346,427	310,267	310,891	336,886
Profits		2023	2022	2021	2020	2019	5-yr. avg.
Net Income (Total Revenue - Total Farm Costs + Change in Inv.)		28,341	(41,466)	(72,697)	(52,542)	(44,551)	(36,583)
Net Cash Farm Income (excludes depreciation)		64,858	(8,666)	(41,420)	(22,355)	(15,635)	(4,644)

† 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*	146	146	146	146	146	146
Average male and female calf price (\$/head)	2,036	1,408	1,121	1,102	1,162	1,366
REVENUE						
Cow Calf	1,914	1,379	1,112	1,002	1,061	1,294
Cull animals and slaughter receipts	215	159	131	132	142	156
Breeding livestock receipts	-	-	-	-	-	-
Calf Sales and transfer to retained ownership enterprise	1,606	1,115	887	870	919	1,079
Government payments	94.0	106.0	94.0	-	-	58.8
Other returns	-	-	-	-	-	-
Total Cow-Calf Revenue	1,914	1,379	1,112	1,002	1,061	1,294
VARIABLE COSTS						
Animal purchases	45.9	45.9	45.9	45.9	45.9	46
Feed (purchase feed, fertiliser, seed, pesticides)	553.6	541.0	584.0	413.4	419.2	502
Machinery (maintenance, depreciation, contractor)	332.3	306.1	286.6	277.2	267.9	294
Fuel, energy, lubricants, water	149.4	130.0	82.8	64.7	70.1	99
Vet & medicine	36.4	37.6	35.7	34.5	33.4	36
Other inputs cow calf enterprise	64.9	63.5	59.2	57.1	56.9	60
Labour						
Paid Labour	-	-	-	-	-	-
Unpaid Labour	638.5	638.6	590.7	568.6	555.7	598
Total Variable Costs	1,821.0	1,762.8	1,684.9	1,461.5	1,449.2	1,636
CAPITAL COSTS						
Insurance, taxes	135.4	136.7	127.5	122.8	119.7	128
Buildings (maintenance, depreciation)	113.4	102.9	91.9	87.9	87.6	97
Land Cost	-	-	-	-	-	-
Rented Land	222.8	217.2	209.4	173.8	169.6	199
Own Land	272.6	260.6	243.9	218.9	209.8	241
Capital Costs	-	-	-	-	-	-
Liabilities	150.2	146.2	141.8	141.6	156.5	147
Own capital	21.9	18.5	5.0	0.0	0.0	9
Total Capital Costs	916.2	882.3	819.6	745.0	743.2	821
COSTS						
Cash Costs	1,573.2	1,526.3	1,478.2	1,239.1	1,253.4	1,414
Depreciation Costs	231.1	201.0	186.7	179.8	173.5	194
Opportunity Costs	933.0	917.8	839.6	787.6	765.5	849
Total Production Costs	2,737.2	2,645.0	2,504.4	2,206.5	2,192.4	2,457
Profits	2023	2022	2021	2020	2019	5-yr. avg.
Short-term profit (cash costs)	341.0	(146.8)	(366.5)	(237.1)	(192.4)	(120)
Medium-term profit (cash + depreciation)	109.9	(347.8)	(553.2)	(416.9)	(365.9)	(315)
Long-term profit (cash + depreciation + opportunity)	(823.0)	(1,265.6)	(1,392.8)	(1,204.5)	(1,131.4)	(1,163)

*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	66,480	66,480	66,480	66,480	66,480	66,480
Average male and female weaning weight (lbs)	578	578	578	578	578	
Average male and female calf price at weaning (\$/lb)	3.52	2.44	1.94	1.91	2.01	2.36
REVENUE						
Cow Calf Operation	4.20	3.03	2.44	2.20	2.33	2.84
Cull animals and slaughter receipts	0.47	0.35	0.29	0.29	0.31	0.34
Breeding livestock receipts	-	-	-	-	-	-
Calf Sales and transfer to retained ownership enterprise	3.53	2.45	1.95	1.91	2.02	2.37
Government payments	0.21	0.23	0.21	-	-	0.13
Other returns	-	-	-	-	-	-
Total Cow-Calf Revenue	4.20	3.03	2.44	2.20	2.33	2.84
VARIABLE COSTS						
Animal purchases	0.10	0.10	0.10	0.10	0.10	0.10
Feed (purchase feed, fertiliser, seed, pesticides)	1.22	1.19	1.28	0.91	0.92	1.10
Machinery (maintenance, depreciation, contractor)	0.73	0.67	0.63	0.61	0.59	0.65
Fuel, energy, lubricants, water	0.33	0.29	0.18	0.14	0.15	0.22
Vet & medicine	0.08	0.08	0.08	0.08	0.07	0.08
Other inputs cow calf enterprise	0.14	0.14	0.13	0.13	0.13	0.13
Labour						
Paid Labour	-	-	-	-	-	-
Unpaid Labour	1.40	1.40	1.30	1.25	1.22	1.31
Total Variable Costs	4.0	3.9	3.7	3.2	3.2	3.6
CAPITAL COSTS						
Insurance, taxes	0.30	0.30	0.28	0.27	0.26	0.28
Buildings (maintenance, depreciation)	0.25	0.23	0.20	0.19	0.19	0.21
Land Cost						
Rented Land	0.49	0.48	0.46	0.38	0.37	0.44
Owned Land	0.60	0.57	0.54	0.48	0.46	0.53
Capital Costs						
Liabilities	0.33	0.32	0.31	0.31	0.34	0.32
Own capital	0.05	0.04	0.01	0.00	0.00	0.02
Total Capital Costs	2.0	1.9	1.8	1.6	1.6	1.8
COSTS						
Cash Costs	3.45	3.35	3.25	2.72	2.75	3.11
Depreciation Costs	0.51	0.44	0.41	0.39	0.38	0.43
Opportunity Costs	2.05	2.02	1.84	1.73	1.68	1.86
Total Production Costs	6.01	5.81	5.50	4.85	4.81	5.40
Profits	2023	2022	2021	2020	2019	5-yr. avg.
Short-term profit (cash costs)	0.75	(0.32)	(0.80)	(0.52)	(0.42)	(0.26)
Medium-term profit (cash + depreciation)	0.24	(0.76)	(1.21)	(0.92)	(0.80)	(0.69)
Long-term profit (cash + depreciation + opportunity)	(1.81)	(2.78)	(3.06)	(2.65)	(2.48)	(2.56)

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