

Farm Characteristics

LL_05

Farm Description A cow-calf operation with 246 cows, utilizing mostly homegrown feed.

Winter Feeding Ration (lbs/cow/day as fed) 200 days on hay (13 lb) and silage (56 lb)

Retained Ownership/Replacement Ration (lb/head/day as fed) Replacements: 213 days on hay (8 lb), silage (33 lb) and grain (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
Average Annual Precipitation (mm)	400-500
Ecoregion	Aspen Parkland
Stocking Rate (Animal Unit days per acre)	86
Fertilize Hay (yes/no)	Yes
Fertilize Pasture (yes/no)	No
Typical Hay Yield (tonnes/acre)	1.6
Grassland Acres (owned+rented)	761
Crop Acres (includes hay) (owned+rented)	460
Bush and other acres	0

Physical Performance Indicators

	Angus, Hereford, Simmental, Limousin
Breed	
Cow:Bull Ratio	21:1
Bull Culling Rate (%)	8%
Mature Cow Weight (lb)	1,400
Heifer Retention for a steady herd (%)	15%
Cow Death Loss (%)	1.3%
Cow Culling Rate (%)	13.7%
Calves alive after 24hr/100 Cows exposed	93
Calf Death Loss (%) 24 hr to weaning	5%
Calves weaned per 100 cows exposed	89
Total Liveweight Sold per Cow (lb)	737
Weaning Weight (lb)	679
205 day adjusted Weaning Weight (lb)	568
Average Daily Gain pre-weaning (lb)	2.36
Weaning Weight as % of Cow Weight	48%

Production System

Herd size	246
Days on field feeding (e.g. swath grazing)	0
Days supplemented on pasture	0
Days on full winter feed	200
Calving Start date	January 22
Weaning date	October 21
Sale date	October 21
Retained ownership	Replacements
% of feed purchased	0.6%
% of land in crops	38%
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

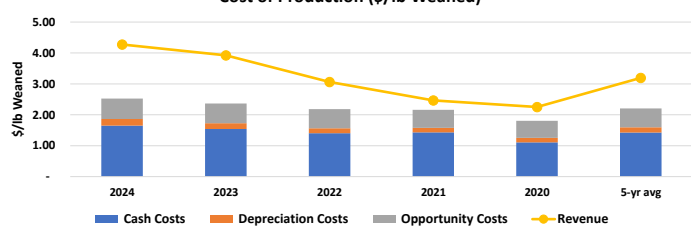
Opportunity Costs = Calculated cost for using own production factors like labour (family working hours * wage for qualified local labour, land (own land * regional land rents) and capital (non-land equity * long-term government bonds interest rate)

Whole Farm Profitability = Market returns (+ coupled payments) (+ decoupled payments) - whole-farm costs +/- changes in inventory +/- capital gains/losses.

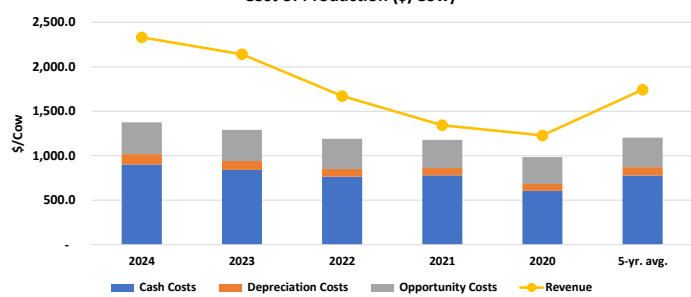
Whole Farm Net Income = Whole farm profitability + depreciation + changes in inventory + capital gains/losses. Known as: 'Net farm income' (Agri Profits, 2018)

Revenue = sales of calves, cull cows, breeding stock, government payments and other revenue applicable to the specific enterprise

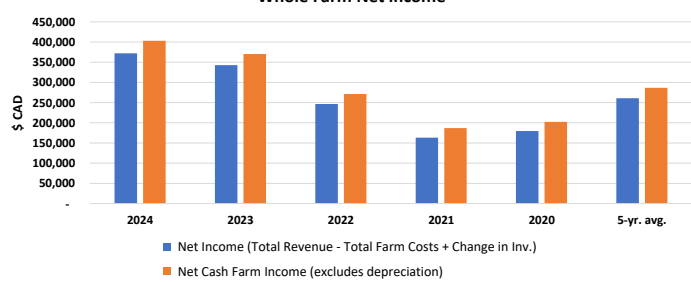
Cost of Production (\$/lb Weaned)



Cost of Production (\$/Cow)



Whole Farm Net income



Whole Farm Overview Page

Overview							
Operation Maturity	Medium						
Herd Size	246						
Paid Labour (livestock only) (hours)	192			Beef Animals Sold from Retained Ownership	N/A		
Unpaid Labour (livestock only) (hours)	2,300						
Average wages - paid and unpaid (\$/hr)	15.48						
Revenue		2024	2023	2022	2021	2020	5-yr. avg.
Market Revenue	5-yr avg	573,437	515,769	385,030	307,361	302,168	416,753
Cow-Calf	86%	573,437	515,769	385,030	307,361	302,168	416,753
Cash Crops	0%	-	-	-	-	-	-
Retained Ownership	0%	-	-	-	-	-	-
Government Payments	2%	-	10,824	26,076	23,124	-	12,005
Other Farm Revenue †	12%	56,883	56,588	56,333	56,378	56,449	56,526
Total Revenue	100%	630,321	583,181	467,439	386,863	358,617	485,284
Change in Inventory		-	-	-	-	-	-
Expenses		2024	2023	2022	2021	2020	5-yr. avg.
Depreciation		31,602	27,554	24,839	23,653	22,824	26,094
Machinery		19,521	16,120	14,015	13,532	13,081	15,254
Buildings		12,080	11,434	10,824	10,121	9,743	10,840
Quota econ. Accounting		-	-	-	-	-	-
Overhead costs		65,927	67,039	66,025	56,339	51,968	61,460
Land improvement		6,032	6,032	5,410	4,882	4,703	5,412
Machinery Maintenance		16,539	14,636	12,952	12,271	12,071	13,694
Buildings Maintenance		651	728	661	567	534	628
Contract labour		14,833	14,833	15,321	14,546	14,032	14,713
Diesel, Gasoline, Natural Gas		14,416	14,552	17,633	12,579	10,277	13,891
Electricity		4,850	7,693	5,321	3,229	2,374	4,693
Water		-	-	-	-	-	-
Farm insurance		3,546	3,546	3,662	3,477	3,354	3,517
Disability and accident insurance		-	-	-	-	-	-
Farm taxes and duties		1,094	1,094	1,130	1,073	1,035	1,085
Advisor costs		1,378	1,378	1,423	1,351	1,303	1,367
Accountant & legal fees		842	842	870	826	797	835
Phone & utilities		1,747	1,706	1,642	1,538	1,488	1,624
Other overhead costs		-	-	-	-	-	-
Wages, rent and interest payments		44,291	43,048	43,815	39,813	32,289	40,651
Paid Labour		-	-	-	-	-	-
Total land rents		44,128	40,657	39,308	37,422	32,127	38,728
Total interest on debt		163	2,392	4,507	2,392	163	1,923
Cow-Calf		80,584	65,782	47,593	69,230	39,596	60,557
Animal purchases		6,463	5,106	4,143	4,143	4,143	4,800
Purchased feed		40,417	28,006	10,105	35,248	7,649	24,285
Other fixed and var. costs *		33,704	32,669	33,345	29,840	27,804	31,472
Retained Ownership		-	-	-	-	-	-
Animal purchases		-	-	-	-	-	-
Purchased feed		-	-	-	-	-	-
Other fixed and var. costs *		-	-	-	-	-	-
Crop and forage		36,059	36,923	38,791	34,540	32,264	35,715
Seed		7,146	6,917	6,048	5,725	5,482	6,264
Fertilizer		15,421	15,529	16,871	14,680	13,454	15,191
Herbicide		2,390	3,434	4,270	3,867	3,694	3,531
Fungicide & Insecticide		-	-	-	-	-	-
Irrigation		-	-	-	-	-	-
Contract labour		5,311	5,311	5,486	5,208	5,024	5,268
Fuel costs (crop & forage)		2,242	2,266	2,780	1,936	1,589	2,162
Other crop and forage		3,549	3,466	3,336	3,124	3,023	3,299
Total Farm Costs (excludes unpaid labour)		258,462	240,346	221,063	223,575	178,941	224,478
Cash Costs (Total Farm Costs - Depreciation)		226,860	212,793	196,224	199,922	156,117	198,383
Depreciation & Opportunity Costs (including unpaid labour)		67,218	63,170	60,455	59,270	58,441	61,711
Total Economic Costs (cash, depr, opportunity)		294,078	275,963	256,679	259,192	214,558	260,094
Profits		2024	2023	2022	2021	2020	5-yr. avg.
Net Income (Total Revenue - Total Farm Costs + Change in Inv.)		371,859	342,834	246,376	163,287	179,675	260,806
Net Cash Farm Income (excludes depreciation)		402,878	370,101	271,182	186,863	202,351	286,675

† 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)	2024	2023	2022	2021	2020	5 yr. avg.
No. of Cows*	246	246	246	246	246	246
Average male and female calf price (\$/head)	2,528	2,320	1,726	1,383	1,349	1,861
REVENUE						
Cow Calf	2,331	2,141	1,671	1,343	1,228	1,743
Cull animals and slaughter receipts	286	220	162	126	133	185
Breeding livestock receipts	-	-	-	-	-	-
Calf Sales and transfer to retained ownership enterprise	2,045	1,877	1,403	1,124	1,095	1,509
Government payments	-	44.0	106.0	94.0	-	48.8
Other returns	-	-	-	-	-	-
Total Cow-Calf Revenue	2,331	2,141	1,671	1,343	1,228	1,743
VARIABLE COSTS						
Animal purchases	26.3	20.8	16.8	16.8	16.8	20
Feed (purchase feed, fertiliser, seed, pesticides)	304.7	257.7	187.2	274.5	154.5	236
Machinery (maintenance, depreciation, contractor)	210.0	188.7	172.3	159.8	154.7	177
Fuel, energy, lubricants, water	80.4	90.7	92.7	62.2	49.8	75
Vet & medicine	50.5	50.5	52.2	49.5	47.8	50
Other inputs cow calf enterprise	101.2	96.7	97.3	84.5	77.5	91
Labour						
Paid Labour	-	-	-	-	-	-
Unpaid Labour	150.8	149.3	149.2	137.2	132.0	144
Total Variable Costs	923.8	854.3	767.7	784.6	633.2	793
CAPITAL COSTS						
Insurance, taxes	17.6	17.4	17.6	16.3	15.7	17
Buildings (maintenance, depreciation)	47.1	44.6	40.7	36.7	35.2	41
Land Cost	-	-	-	-	-	-
Rented Land	179.4	165.3	159.8	152.1	130.6	157
Own Land	131.3	122.2	115.6	106.4	99.6	115
Capital Costs	-	-	-	-	-	-
Liabilities	0.6	8.8	16.1	8.3	0.6	7
Own capital	76.4	78.1	73.7	73.2	70.2	74
Total Capital Costs	452.3	436.3	423.5	393.1	351.8	411
COSTS						
Cash Costs	900.8	840.1	764.6	779.6	605.0	778
Depreciation Costs	117.0	101.0	88.1	81.3	78.2	93
Opportunity Costs	358.4	349.5	338.5	316.9	301.8	333
Total Production Costs	1,376.1	1,290.6	1,191.1	1,177.7	985.0	1,204
Profits	2024	2023	2022	2021	2020	5-yr. avg.
Short-term profit (cash costs)	1,430.3	1,300.5	906.6	563.9	623.3	965
Medium-term profit (cash + depreciation)	1,313.3	1,199.5	818.5	482.6	545.1	872
Long-term profit (cash + depreciation + opportunity)	954.9	850.0	480.0	165.7	243.4	539

*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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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.



Cow-Calf Enterprise (\$/lb Weaned)	2024	2023	2022	2021	2020	5 yr. avg.
Pounds Weaned	134,161	134,161	134,161	134,161	134,161	134,161
Average male and female weaning weight (lbs)	679	679	679	679	679	679
Average male and female calf price at weaning (\$/lb)	3.72	3.42	2.54	2.04	1.99	2.74
REVENUE						
Cow Calf Operation	4.27	3.93	3.06	2.46	2.25	3.20
Cull animals and slaughter receipts	0.53	0.40	0.30	0.23	0.24	0.34
Breeding livestock receipts	-	-	-	-	-	-
Calf Sales and transfer to retained ownership enterprise	3.75	3.44	2.57	2.06	2.01	2.77
Government payments	-	0.08	0.19	0.17	-	0.09
Other returns	-	-	-	-	-	-
Total Cow-Calf Revenue	4.27	3.93	3.06	2.46	2.25	3.20
VARIABLE COSTS						
Animal purchases	0.05	0.04	0.03	0.03	0.03	0.04
Feed (purchase feed, fertiliser, seed, pesticides)	0.56	0.47	0.34	0.50	0.28	0.43
Machinery (maintenance, depreciation, contractor)	0.39	0.35	0.32	0.29	0.28	0.32
Fuel, energy, lubricants, water	0.15	0.17	0.17	0.11	0.09	0.14
Vet & medicine	0.09	0.09	0.10	0.09	0.09	0.09
Other inputs cow calf enterprise	0.19	0.18	0.18	0.16	0.14	0.17
Labour						
Paid Labour	-	-	-	-	-	-
Unpaid Labour	0.28	0.27	0.27	0.25	0.24	0.26
Total Variable Costs	1.7	1.6	1.4	1.4	1.2	1.5
CAPITAL COSTS						
Insurance, taxes	0.03	0.03	0.03	0.03	0.03	0.03
Buildings (maintenance, depreciation)	0.09	0.08	0.07	0.07	0.06	0.07
Land Cost						
Rented Land	0.33	0.30	0.29	0.28	0.24	0.29
Owned Land	0.24	0.22	0.21	0.20	0.18	0.21
Capital Costs						
Liabilities	0.00	0.02	0.03	0.02	0.00	0.01
Own capital	0.14	0.14	0.14	0.13	0.13	0.14
Total Capital Costs	0.8	0.8	0.8	0.7	0.6	0.8
COSTS						
Cash Costs	1.65	1.54	1.40	1.43	1.11	1.43
Depreciation Costs	0.21	0.19	0.16	0.15	0.14	0.17
Opportunity Costs	0.66	0.64	0.62	0.58	0.55	0.61
Total Production Costs	2.52	2.37	2.18	2.16	1.81	2.21
Profits	2024	2023	2022	2021	2020	5-yr. avg.
Short-term profit (cash costs)	2.62	2.38	1.66	1.03	1.14	1.77
Medium-term profit (cash + depreciation)	2.41	2.20	1.50	0.88	1.00	1.60
Long-term profit (cash + depreciation + opportunity)	1.75	1.56	0.88	0.30	0.45	0.99

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