



Farm Characteristics	CA-SK-4
Farm Description	A cow-calf operation producing predominantly homegrown feed located in one of the most productive agricultural regions on the prairies
Winter Feeding Ration (lbs/cow/day as fed)	60 days of bale grazing at 3% body weight with 5-10% wasted (45 lb) followed by 60 days of corn grazing and then 45 days of greenfeed (30 lb) and hay (9 lb)
Retained Ownership/Replacement Ration (lb/head/day as fed)	140 days of 10 lb hay, 10 lb greenfeed, and 5.5 lb oats

Disclaimer: This benchmark is based on 5 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)	30
Fertilize Hay (yes/no)	Yes
Fertilize Pasture (yes/no)	No
Typical Hay Yield (tonnes/acre)	1.8
Grassland Acres (owned+rented)	1,240
Crop Acres (includes hay) (owned+rented)	229
Bush and other acres	0

Physical Performance Indicators	
Breed	Angus cross, Simmental
Cow:Bull Ratio	25:1
Bull Culling Rate (%)	20%
Mature Cow Weight (lb)	1,500
Heifer Retention for a steady herd (%)	9%
Cow Death Loss (%)	1.0%
Cow Culling Rate (%)	8.0%
Calves alive after 24hr/100 Cows exposed	96
Calf Death Loss (%) 24 hr to weaning	4%
Calves weaned per 100 cows exposed	93
Total Liveweight Sold per Cow (lb)	632
Weaning Weight (lb)	598
205 day adjusted Weaning Weight (lb)	601
Average Daily Gain pre-weaning (lb)	2.52
Weaning Weight as % of Cow Weight	40%

Production System	
Herd size	120
Days on field feeding (e.g. swath grazing)	60
Days supplemented on pasture	60
Days on full winter feed	45
Calving Start date	March 15
Weaning date	October 25
Sale date	October 25
Retained ownership	Replacements
% of feed purchased	5.1%
% of land in crops	16%
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

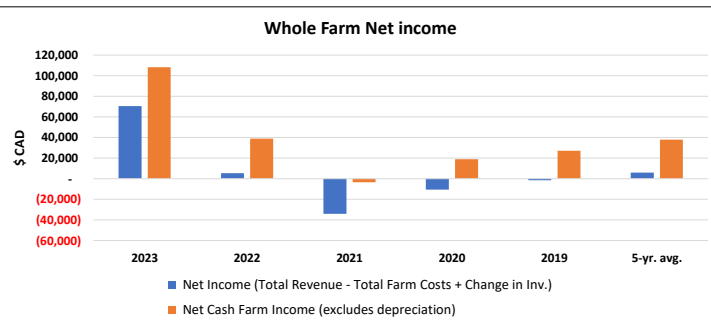
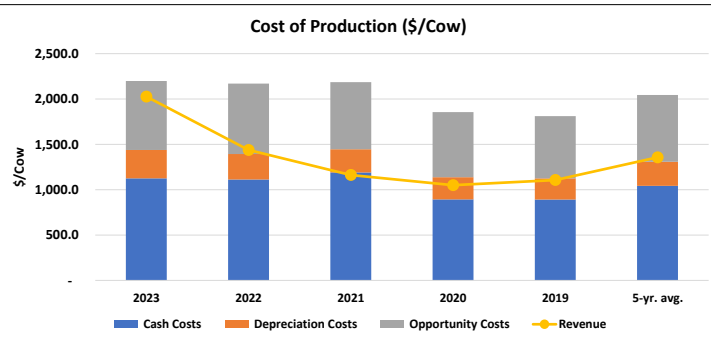
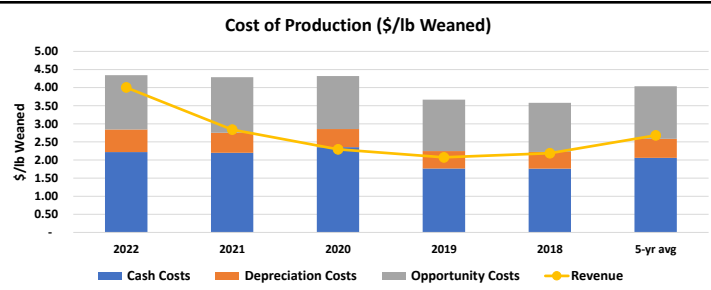
Footnotes:

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	Start-up						
Herd Size	120		Beef Animals Sold from Retained Ownership		N/A		
Paid Labour (livestock only) (hours)	-						
Unpaid Labour (livestock only) (hours)	2,855						
Average wages - paid and unpaid (\$/hr)	26.43						
Revenue		2023	2022	2021	2020	2019	5-yr. avg.
Market Revenue	5-yr avg	243,210	160,532	127,437	126,135	135,305	158,524
Cow-Calf	97%	243,210	160,532	127,437	125,991	132,789	157,992
Cash Crops	0%	-	-	-	144	2,515	532
Retained Ownership	0%	-	-	-	-	-	-
Government Payments	3%	-	12,000	12,000	-	-	4,800
Other Farm Revenue †	0%	1	-	-	-	-	0
Total Revenue	100%	243,210	172,532	139,437	126,135	135,305	163,324
Change in Inventory		-	-	-	-	-	-
Expenses		2023	2022	2021	2020	2019	5-yr. avg.
Depreciation		37,717	33,575	30,525	29,447	28,607	31,974
Machinery		27,569	23,968	21,542	20,800	20,107	22,797
Buildings		10,147	9,606	8,983	8,647	8,500	9,177
Quota econ. Accounting		-	-	-	-	-	-
Overhead costs		40,308	36,447	31,712	29,335	29,050	33,370
Land improvement		3,774	3,692	3,620	3,413	3,426	3,585
Machinery Maintenance		1,294	1,299	1,361	1,250	1,244	1,289
Buildings Maintenance		9,005	8,606	7,902	7,650	7,748	8,182
Contract labour		-	-	-	-	-	-
Diesel, Gasoline, Natural Gas		74	93	63	44	63	67
Electricity		11,797	8,159	4,949	3,641	3,563	6,422
Water		-	-	-	-	-	-
Farm insurance		5,296	5,470	5,194	5,010	4,860	5,166
Disability and accident insurance		277	287	272	263	255	271
Farm taxes and duties		2,981	3,079	2,923	2,820	2,736	2,908
Advisor costs		235	243	231	223	216	229
Accountant & legal fees		2,185	2,257	2,142	2,067	2,005	2,131
Phone & utilities		2,702	2,600	2,435	2,356	2,339	2,487
Other overhead costs		688	662	620	600	596	633
Wages, rent and interest payments		44,663	40,510	36,432	35,794	36,669	38,813
Paid Labour		-	-	-	-	-	-
Total land rents		21,710	20,405	19,372	18,871	18,523	19,776
Total Interest on debt		22,952	20,104	17,060	16,923	18,146	19,037
Cow-Calf		20,208	24,831	46,936	16,861	16,414	25,050
Animal purchases		5,500	5,500	5,500	5,500	5,500	5,500
Purchased feed		7,103	11,484	34,294	4,649	4,132	12,332
Other fixed and var. costs *		7,605	7,847	7,142	6,713	6,783	7,218
Retained Ownership		-	-	-	-	-	-
Animal purchases		-	-	-	-	-	-
Purchased feed		-	-	-	-	-	-
Other fixed and var. costs *		-	-	-	-	-	-
Crop and forage		29,755	31,800	27,831	25,288	26,019	28,138
Seed		7,579	6,598	6,797	6,456	6,870	6,860
Fertilizer		16,779	19,076	15,417	13,444	13,937	15,731
Herbicide		3,239	4,028	3,648	3,484	3,327	3,545
Fungicide & Insecticide		-	-	-	-	-	-
Irrigation		-	-	-	-	-	-
Contract labour		300	310	295	284	276	293
Fuel costs (crop & forage)		-	-	-	-	-	-
Other crop and forage		1,857	1,788	1,674	1,620	1,608	1,709
Total Farm Costs (excludes unpaid labour)		172,650	167,162	173,436	136,726	136,759	157,347
Cash Costs (Total Farm Costs - Depreciation)		134,933	133,588	142,911	107,278	108,152	125,372
Depreciation & Opportunity Costs (including unpaid labour)		113,160	109,017	105,968	104,890	104,050	107,417
Total Economic Costs (cash, depr, opportunity)		248,093	242,605	248,879	212,169	212,201	232,789
Profits		2023	2022	2021	2020	2019	5-yr. avg.
Net Income (Total Revenue - Total Farm Costs + Change in Inv.)		70,560	5,369	(33,999)	(10,591)	(1,454)	5,977
Net Cash Farm Income (excludes depreciation)		108,276	38,944	(3,474)	18,857	27,153	37,951

† 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*	120	120	120	120	120	120
Average male and female calf price (\$/head)	2,187	1,444	1,150	1,132	1,186	1,420
REVENUE						
Cow Calf	2,027	1,438	1,162	1,050	1,107	1,357
Cull animals and slaughter receipts	162	108	83	87	98	107
Breeding livestock receipts	-	-	-	-	-	-
Calf Sales and transfer to retained ownership enterprise	1,865	1,230	979	963	1,009	1,209
Government payments	-	100.0	100.0	-	-	40.0
Other returns	-	-	-	-	-	-
Total Cow-Calf Revenue	2,027	1,438	1,162	1,050	1,107	1,357
VARIABLE COSTS						
Animal purchases	45.8	45.8	45.8	45.8	45.8	46
Feed (purchase feed, fertiliser, seed, pesticides)	336.1	388.9	545.4	275.5	276.5	364
Machinery (maintenance, depreciation, contractor)	243.0	213.1	193.3	185.9	176.9	202
Fuel, energy, lubricants, water	98.9	68.8	41.8	30.7	29.6	54
Vet & medicine	29.6	30.6	29.0	28.0	27.2	29
Other inputs cow calf enterprise	82.2	82.8	75.7	71.6	71.5	77
Labour						
Paid Labour	-	-	-	-	-	-
Unpaid Labour	631.2	651.9	619.0	596.4	568.5	613
Total Variable Costs	1,466.9	1,482.0	1,550.0	1,233.9	1,196.1	1,386
CAPITAL COSTS						
Insurance, taxes	71.3	73.6	69.9	67.4	64.3	69
Buildings (maintenance, depreciation)	159.6	151.8	140.7	135.7	132.9	144
Land Cost	-	-	-	-	-	-
Rented Land	180.9	170.0	161.4	157.1	151.9	164
Own Land	128.9	125.1	122.1	120.5	117.7	123
Capital Costs	-	-	-	-	-	-
Liabilities	191.3	167.5	142.2	140.9	148.4	158
Own capital	0.0	0.0	0.0	0.0	0.0	0
Total Capital Costs	732.0	688.1	636.3	621.5	615.1	659
COSTS						
Cash Costs	1,124.4	1,113.2	1,190.9	893.4	891.1	1,043
Depreciation Costs	314.3	279.8	254.4	245.1	234.0	266
Opportunity Costs	760.1	777.1	741.1	716.9	686.2	736
Total Production Costs	2,198.9	2,170.1	2,186.4	1,855.4	1,811.2	2,044
Profits						
	2023	2022	2021	2020	2019	5-yr. avg.
Short-term profit (cash costs)	902.3	324.5	(29.0)	156.6	215.5	314
Medium-term profit (cash + depreciation)	588.0	44.7	(283.3)	(88.6)	(18.4)	48
Long-term profit (cash + depreciation + opportunity)	(172.1)	(732.3)	(1,024.4)	(805.5)	(704.6)	(688)

*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\$.

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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	60,743	60,743	60,743	60,743	60,743	60,743
Average male and female weaning weight (lbs)	598	598	598	598	598	
Average male and female calf price at weaning (\$/lb)	3.66	2.41	1.92	1.89	1.98	2.37
REVENUE						
Cow Calf Operation	4.00	2.84	2.30	2.07	2.19	2.68
Cull animals and slaughter receipts	0.32	0.21	0.16	0.17	0.19	0.21
Breeding livestock receipts	-	-	-	-	-	-
Calf Sales and transfer to retained ownership enterprise	3.68	2.43	1.93	1.90	1.99	2.39
Government payments	-	0.20	0.20	-	-	0.08
Other returns	-	-	-	-	-	-
Total Cow-Calf Revenue	4.00	2.84	2.30	2.07	2.19	2.68
VARIABLE COSTS						
Animal purchases	0.09	0.09	0.09	0.09	0.09	0.09
Feed (purchase feed, fertiliser, seed, pesticides)	0.66	0.77	1.08	0.54	0.55	0.72
Machinery (maintenance, depreciation, contractor)	0.48	0.42	0.38	0.37	0.35	0.40
Fuel, energy, lubricants, water	0.20	0.14	0.08	0.06	0.06	0.11
Vet & medicine	0.06	0.06	0.06	0.06	0.05	0.06
Other inputs cow calf enterprise	0.16	0.16	0.15	0.14	0.14	0.15
Labour						
Paid Labour	-	-	-	-	-	-
Unpaid Labour	1.25	1.29	1.22	1.18	1.12	1.21
Total Variable Costs	2.9	2.9	3.1	2.4	2.4	2.7
CAPITAL COSTS						
Insurance, taxes	0.14	0.15	0.14	0.13	0.13	0.14
Buildings (maintenance, depreciation)	0.32	0.30	0.28	0.27	0.26	0.28
Land Cost						
Rented Land	0.36	0.34	0.32	0.31	0.30	0.32
Owned Land	0.25	0.25	0.24	0.24	0.23	0.24
Capital Costs						
Liabilities	0.38	0.33	0.28	0.28	0.29	0.31
Own capital	0.00	0.00	0.00	0.00	0.00	0.00
Total Capital Costs	1.4	1.4	1.3	1.2	1.2	1.3
COSTS						
Cash Costs	2.22	2.20	2.35	1.76	1.76	2.06
Depreciation Costs	0.62	0.55	0.50	0.48	0.46	0.52
Opportunity Costs	1.50	1.54	1.46	1.42	1.36	1.45
Total Production Costs	4.34	4.29	4.32	3.67	3.58	4.04
Profits						
Short-term profit (cash costs)	1.78	0.64	(0.06)	0.31	0.43	0.62
Medium-term profit (cash + depreciation)	1.16	0.09	(0.56)	(0.17)	(0.04)	0.10
Long-term profit (cash + depreciation + opportunity)	(0.34)	(1.45)	(2.02)	(1.59)	(1.39)	(1.36)

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