

Farm Characteristics	CA-SK-3
Farm Description	A cow-calf operation producing homegrown feed located in a semi-arid shortgrass region of SW Saskatchewan with high proportion of native pasture.
Winter Feeding Ration (lbs/cow/day as fed)	30 days (Nov-Dec) half ration of grass hay (15 lb) fed with field grazed cereal crop residue, followed by 150 days of hay (31 lb) combined with lentil, barley or malt pellets (3 lb), 210 days of free choice mineral (100 g) and year round salt (50 g).
Retained Ownership/Replacement Ration (lb/head/day as fed)	150 days of hay (16 lb) combined with lentils, barley or malt pellets (4 lb), and 210 days of mineral (60 g), and year round salt (30 g).

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	3.5°C
Average Annual Precipitation (mm)	250 - 350 mm
Ecoregion	Mixed grassland
Stocking Rate (Animal Unit days per acre)	8
Fertilize Hay (yes/no)	No
Fertilize Pasture (yes/no)	No
Typical Hay Yield (tonnes/acre)	1.2
Grassland Acres (owned+rented)	8,167
Crop Acres (includes hay) (owned+rented)	556
Bush and other acres	0

Physical Performance Indicators	
Breed	Angus
Cow:Bull Ratio	27:1
Bull Culling Rate (%)	17%
Mature Cow Weight (lb)	1,300
Heifer Retention for a steady herd (%)	13%
Cow Death Loss (%)	1.3%
Cow Culling Rate (%)	12.0%
Calves alive after 24hr/100 Cows exposed	92
Calf Death Loss (%) 24 hr to weaning	3%
Calves weaned per 100 cows exposed	89
Total Liveweight Sold per Cow (lb)	589
Weaning Weight (lb)	558
205 day adjusted Weaning Weight (lb)	612
Average Daily Gain pre-weaning (lb)	2.57
Weaning Weight as % of Cow Weight	43%

Production System	
Herd size	245
Days on field feeding (e.g. swath grazing)	30
Days supplemented on pasture	0
Days on full winter feed	150
Calving Start date	March 25
Weaning date	October 15
Sale date	October 20
Retained ownership	Replacements
% of feed purchased	11.1%
% of land in crops	6%
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)

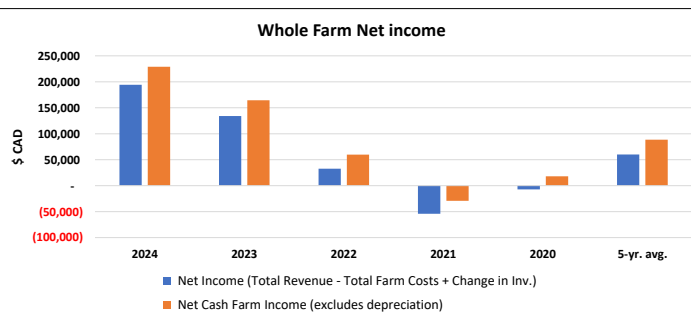
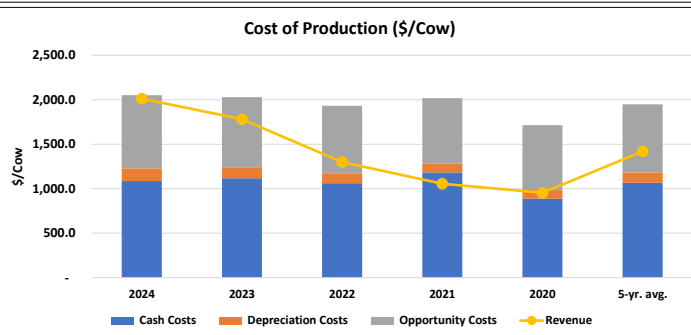
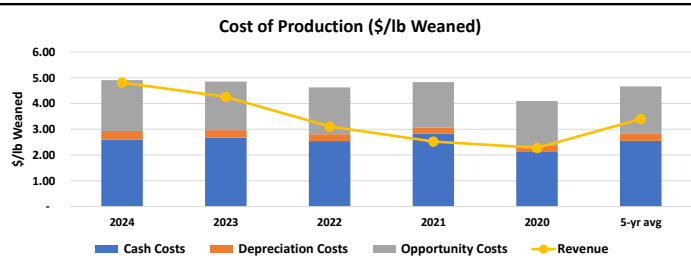
Depreciation = Linear depreciation on machinery and buildings, calculated on replacement values

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	Medium						
Herd Size	245						
Paid Labour (livestock only) (hours)	-			Beef Animals Sold from Retained Ownership	N/A		
Unpaid Labour (livestock only) (hours)	2,719						
Average wages - paid and unpaid (\$/hr)	24.67						
Revenue		2024	2023	2022	2021	2020	5-yr. avg.
Market Revenue	5-yr avg	493,044	436,405	294,109	234,362	233,726	338,329
Cow-Calf	96%	493,044	436,405	294,109	234,362	233,726	338,329
Cash Crops	0%	-	-	-	-	-	-
Retained Ownership	0%	-	-	-	-	-	-
Government Payments	3%	-	-	24,500	24,500	-	9,800
Other Farm Revenue †	1%	2,520	2,492	2,480	2,480	2,480	2,490
Total Revenue	100%	495,564	438,897	321,089	261,342	236,206	350,619
Change in Inventory		-	-	-	-	(1,087)	(217)
Expenses		2024	2023	2022	2021	2020	5-yr. avg.
Depreciation		34,845	30,291	27,254	24,904	24,016	28,262
Machinery		22,276	18,395	15,993	14,374	13,879	16,983
Buildings		12,569	11,896	11,262	10,531	10,138	11,279
Quota econ. Accounting		-	-	-	-	-	-
Overhead costs		88,473	94,934	90,436	74,666	66,065	82,915
Land improvement		11,217	10,407	9,540	8,591	7,944	9,540
Machinery Maintenance		7,040	6,230	5,513	4,879	4,318	5,596
Buildings Maintenance		14,407	14,208	13,578	12,468	12,071	13,346
Contract labour		3,056	3,056	3,156	2,997	2,891	3,031
Diesel, Gasoline, Natural Gas		13,515	14,226	17,994	12,201	8,491	13,285
Electricity		13,219	20,969	14,503	8,797	6,472	12,792
Water		-	-	-	-	-	-
Farm insurance		8,254	8,254	8,525	8,094	7,808	8,187
Disability and accident insurance		3,119	3,119	3,222	3,059	2,951	3,094
Farm taxes and duties		5,636	5,636	5,821	5,527	5,332	5,590
Advisor costs		-	-	-	-	-	-
Accountant & legal fees		1,216	1,216	1,256	1,192	1,150	1,206
Phone & utilities		7,496	7,321	7,046	6,599	6,384	6,969
Other overhead costs		299	292	281	264	255	278
Wages, rent and interest payments		84,568	90,456	85,895	80,749	79,850	84,304
Paid Labour		-	-	-	-	-	-
Total land rents		69,570	65,774	62,091	61,418	61,091	63,989
Total interest on debt		14,998	24,682	23,805	19,331	18,759	20,315
Cow-Calf		76,796	71,772	66,596	118,008	55,718	77,778
Animal purchases		15,947	12,108	9,918	8,509	8,700	11,036
Purchased feed		37,539	36,786	33,576	88,437	27,121	44,692
Other fixed and var. costs *		23,310	22,878	23,103	21,062	19,896	22,050
Retained Ownership		-	-	-	-	-	-
Animal purchases		-	-	-	-	-	-
Purchased feed		-	-	-	-	-	-
Other fixed and var. costs *		-	-	-	-	-	-
Crop and forage		16,671	17,402	18,284	17,231	16,592	17,236
Seed		549	544	474	488	463	503
Fertilizer		-	-	-	-	-	-
Herbicide		1,799	2,584	3,214	2,911	2,780	2,657
Fungicide & Insecticide		-	-	-	-	-	-
Irrigation		-	-	-	-	-	-
Contract labour		12,195	12,195	12,596	11,959	11,536	12,097
Fuel costs (crop & forage)		-	-	-	-	-	-
Other crop and forage		2,128	2,078	2,000	1,873	1,812	1,979
Total Farm Costs (excludes unpaid labour)		301,353	304,855	288,466	315,559	242,242	290,495
Cash Costs (Total Farm Costs - Depreciation)		266,508	274,563	261,211	290,655	218,226	262,233
Depreciation & Opportunity Costs (including unpaid labour)		101,902	97,348	94,311	91,961	91,073	95,319
Total Economic Costs (cash, depr, opportunity)		368,410	371,911	355,522	382,616	309,298	357,551
Profits		2024	2023	2022	2021	2020	5-yr. avg.
Net Income (Total Revenue - Total Farm Costs + Change in Inv.)		194,211	134,042	32,623	(54,217)	(7,123)	59,907
Net Cash Farm Income (excludes depreciation)		229,015	164,321	59,877	(29,313)	17,980	88,376

† 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*	245	245	245	245	245	245
Average male and female calf price (\$/head)	2,245	2,031	1,371	1,097	1,087	1,566
REVENUE						
Cow Calf	2,012	1,781	1,300	1,057	954	1,421
Cull animals and slaughter receipts	305	237	156	120	126	189
Breeding livestock receipts	-	-	-	-	-	-
Calf Sales and transfer to retained ownership enterprise	1,707	1,545	1,045	837	828	1,192
Government payments	-	-	100.0	100.0	-	40.0
Other returns	-	-	-	-	-	-
Total Cow-Calf Revenue	2,012	1,781	1,300	1,057	954	1,421
VARIABLE COSTS						
Animal purchases	65.1	49.4	40.5	34.7	35.5	45
Feed (purchase feed, fertiliser, seed, pesticides)	217.3	213.9	199.2	417.6	163.8	242
Machinery (maintenance, depreciation, contractor)	181.9	162.8	152.1	139.6	133.2	154
Fuel, energy, lubricants, water	108.6	142.8	131.5	84.8	60.4	106
Vet & medicine	27.5	27.2	26.7	26.0	25.7	27
Other inputs cow calf enterprise	86.9	84.7	84.4	75.5	70.6	80
Labour						
Paid Labour	-	-	-	-	-	-
Unpaid Labour	274.5	274.4	282.6	267.7	258.3	271
Total Variable Costs	961.8	955.1	917.0	1,045.9	747.4	925
CAPITAL COSTS						
Insurance, taxes	86.5	86.5	89.2	84.6	81.6	86
Buildings (maintenance, depreciation)	109.6	105.9	100.5	92.9	89.7	100
Land Cost	-	-	-	-	-	-
Rented Land	284.0	268.5	253.4	250.7	249.4	261
Own Land	527.3	498.6	470.7	465.6	463.1	485
Capital Costs	-	-	-	-	-	-
Liabilities	60.9	100.2	96.4	78.2	75.8	82
Own capital	22.0	14.4	5.1	1.4	7.1	10
Total Capital Costs	1,090.3	1,074.1	1,015.4	973.3	966.6	1,024
COSTS						
Cash Costs	1,086.2	1,118.5	1,063.2	1,183.3	887.9	1,068
Depreciation Costs	142.0	123.4	110.9	101.2	97.6	115
Opportunity Costs	823.9	787.3	758.4	734.7	728.4	767
Total Production Costs	2,052.1	2,029.2	1,932.4	2,019.2	1,713.9	1,949
Profits	2024	2023	2022	2021	2020	5-yr. avg.
Short-term profit (cash costs)	926.2	662.8	237.3	(126.8)	66.0	353
Medium-term profit (cash + depreciation)	784.2	539.4	126.4	(228.0)	(31.6)	238
Long-term profit (cash + depreciation + opportunity)	(39.6)	(247.9)	(632.0)	(962.7)	(760.0)	(528)

*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\$.

Opportunity Costs

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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.

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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)	2024	2023	2022	2021	2020	5 yr. avg.
Pounds Weaned	102,397	102,397	102,397	102,397	102,397	102,397
Average male and female weaning weight (lbs)	558	558	558	558	558	558
Average male and female calf price at weaning (\$/lb)	4.02	3.64	2.46	1.97	1.95	2.81
REVENUE						
Cow Calf Operation	4.82	4.26	3.11	2.53	2.28	3.40
Cull animals and slaughter receipts	0.73	0.57	0.37	0.29	0.30	0.45
Breeding livestock receipts	-	-	-	-	-	-
Calf Sales and transfer to retained ownership enterprise	4.09	3.70	2.50	2.00	1.98	2.85
Government payments	-	-	0.24	0.24	-	0.10
Other returns	-	-	-	-	-	-
Total Cow-Calf Revenue	4.82	4.26	3.11	2.53	2.28	3.40
VARIABLE COSTS						
Animal purchases	0.16	0.12	0.10	0.08	0.08	0.11
Feed (purchase feed, fertiliser, seed, pesticides)	0.52	0.51	0.48	1.00	0.39	0.58
Machinery (maintenance, depreciation, contractor)	0.44	0.39	0.36	0.33	0.32	0.37
Fuel, energy, lubricants, water	0.26	0.34	0.31	0.20	0.14	0.25
Vet & medicine	0.07	0.07	0.06	0.06	0.06	0.06
Other inputs cow calf enterprise	0.21	0.20	0.20	0.18	0.17	0.19
Labour						
Paid Labour	-	-	-	-	-	-
Unpaid Labour	0.66	0.66	0.68	0.64	0.62	0.65
Total Variable Costs	2.3	2.3	2.2	2.5	1.8	2.2
CAPITAL COSTS						
Insurance, taxes	0.21	0.21	0.21	0.20	0.20	0.21
Buildings (maintenance, depreciation)	0.26	0.25	0.24	0.22	0.21	0.24
Land Cost						
Rented Land	0.68	0.64	0.61	0.60	0.60	0.62
Owned Land	1.26	1.19	1.13	1.11	1.11	1.16
Capital Costs						
Liabilities	0.15	0.24	0.23	0.19	0.18	0.20
Own capital	0.05	0.03	0.01	0.00	0.02	0.02
Total Capital Costs	2.6	2.6	2.4	2.3	2.3	2.4
COSTS						
Cash Costs	2.60	2.68	2.54	2.83	2.12	2.55
Depreciation Costs	0.34	0.30	0.27	0.24	0.23	0.28
Opportunity Costs	1.97	1.88	1.81	1.76	1.74	1.83
Total Production Costs	4.91	4.86	4.62	4.83	4.10	4.66
Profits	2024	2023	2022	2021	2020	5-yr. avg.
Short-term profit (cash costs)	2.22	1.59	0.57	(0.30)	0.16	0.84
Medium-term profit (cash + depreciation)	1.88	1.29	0.30	(0.55)	(0.08)	0.57
Long-term profit (cash + depreciation + opportunity)	(0.09)	(0.59)	(1.51)	(2.30)	(1.82)	(1.26)

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