



Farm Characteristics	CA-SK-10
Farm Description	A cow-calf operation with 140 cows, utilizing predominantly homegrown feed.
Winter Feeding Ration (lbs/cow/day as fed)	134 days on hay (35 lb) and barley grain (5 lb)
Retained Ownership/Replacement Ration (lb/head/day as fed)	Replacement heifers: 134 days on hay (20 lb) and barley grain (3 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	3.5° C
Average Annual Precipitation (mm)	150-200 mm
Ecoregion	Mixed Grassland
Stocking Rate (Animal Unit days per acre)	17
Fertilize Hay (yes/no)	No
Fertilize Pasture (yes/no)	No
Typical Hay Yield (tonnes/acre)	0.9
Grassland Acres (owned+rented)	3,022
Crop Acres (includes hay) (owned+rented)	460
Bush and other acres	0

Physical Performance Indicators	
Breed	Angus
Cow:Bull Ratio	23:1
Bull Culling Rate (%)	17%
Mature Cow Weight (lb)	1,300
Heifer Retention for a steady herd (%)	11%
Cow Death Loss (%)	1.6%
Cow Culling Rate (%)	9.3%
Calves alive after 24hr/100 Cows exposed	87
Calf Death Loss (%) 24 hr to weaning	3%
Calves weaned per 100 cows exposed	84
Total Liveweight Sold per Cow (lb)	533
Weaning Weight (lb)	533
205 day adjusted Weaning Weight (lb)	561
Average Daily Gain pre-weaning (lb)	2.32
Weaning Weight as % of Cow Weight	41%

Production System	
Herd size	140
Days on field feeding (e.g. swath grazing)	0
Days supplemented on pasture	0
Days on full winter feed	134
Calving Start date	April 06
Weaning date	November 01
Sale date	November 01
Retained ownership	Replacements
% of feed purchased	13.7%
% of land in crops	13%
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

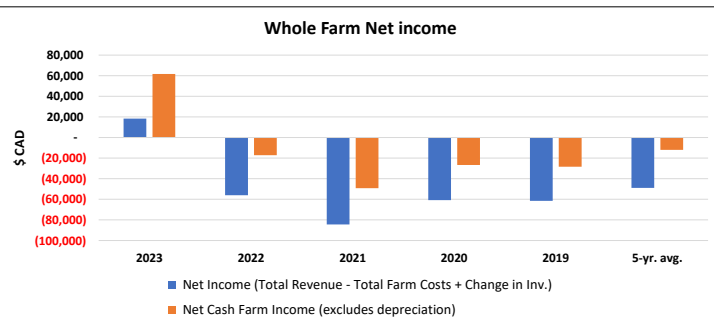
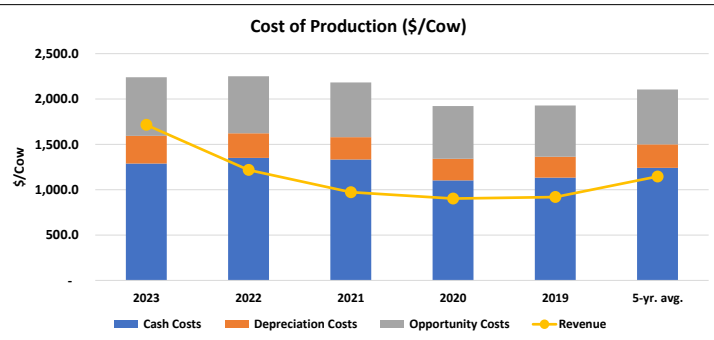
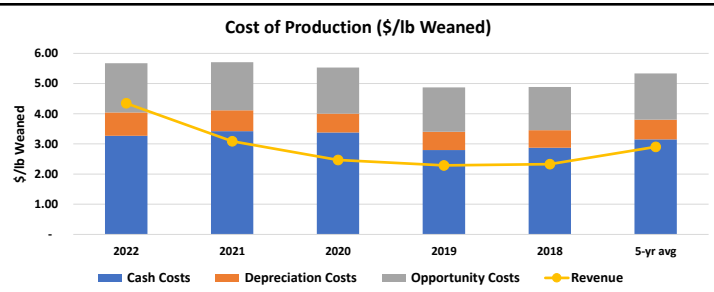
Footnotes:

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	Medium						
Herd Size	140			Beef Animals Sold from Retained Ownership	N/A		
Paid Labour (livestock only) (hours)	661						
Unpaid Labour (livestock only) (hours)	1,870						
Average wages - paid and unpaid (\$/hr)	22.25						
Revenue		2023	2022	2021	2020	2019	5-yr. avg.
Market Revenue	5-yr avg	226,029	156,427	122,175	126,347	128,742	151,944
Cow-Calf	93%	226,029	156,427	122,175	126,347	128,742	151,944
Cash Crops	0%	-	-	-	-	-	-
Retained Ownership	0%	-	-	-	-	-	-
Government Payments	5%	14,000	14,000	14,000	-	-	8,400
Other Farm Revenue †	2%	3,102	3,050	3,056	3,051	3,051	3,062
Total Revenue	100%	243,131	173,477	139,231	129,398	131,793	163,406
Change in Inventory		-	-	-	-	-	-
Expenses		2023	2022	2021	2020	2019	5-yr. avg.
Depreciation		43,334	38,773	35,338	34,084	33,146	36,935
Machinery		29,100	25,299	22,739	21,955	21,223	24,063
Buildings		14,233	13,474	12,600	12,129	11,923	12,872
Quota econ. Accounting		-	-	-	-	-	-
Overhead costs		54,948	55,891	47,968	43,227	45,299	49,467
Land improvement		6,202	6,073	5,786	5,618	5,616	5,859
Machinery Maintenance		9,968	10,006	9,893	9,632	9,518	9,804
Buildings Maintenance		3,365	3,216	2,948	2,854	2,889	3,054
Contract labour		-	-	-	-	-	-
Diesel, Gasoline, Natural Gas		11,054	13,932	9,502	6,655	9,311	10,091
Electricity		7,006	4,846	2,939	2,162	2,116	3,814
Water		-	-	-	-	-	-
Farm insurance		6,753	6,975	6,622	6,388	6,197	6,587
Disability and accident insurance		3,195	3,300	3,133	3,022	2,932	3,116
Farm taxes and duties		4,077	4,211	3,998	3,857	3,742	3,977
Advisor costs		-	-	-	-	-	-
Accountant & legal fees		1,839	1,900	1,804	1,740	1,688	1,794
Phone & utilities		1,420	1,367	1,280	1,238	1,229	1,307
Other overhead costs		69	67	62	60	60	64
Wages, rent and interest payments		72,011	79,839	70,029	67,174	68,916	71,594
Paid Labour		11,607	11,989	11,382	10,980	10,652	11,322
Total land rents		37,304	36,100	35,146	34,684	34,363	35,519
Total Interest on debt		23,100	31,751	23,501	21,510	23,901	24,753
Cow-Calf		44,330	43,150	61,496	38,666	37,312	44,991
Animal purchases		4,125	4,125	4,125	4,125	4,125	4,125
Purchased feed		25,846	24,806	44,337	22,355	21,372	27,743
Other fixed and var. costs *		14,359	14,219	13,033	12,186	11,816	13,122
Retained Ownership		-	-	-	-	-	-
Animal purchases		-	-	-	-	-	-
Purchased feed		-	-	-	-	-	-
Other fixed and var. costs *		-	-	-	-	-	-
Crop and forage		10,163	11,821	8,866	7,007	8,647	9,301
Seed		-	-	-	-	-	-
Fertilizer		-	-	-	-	-	-
Herbicide		-	-	-	-	-	-
Fungicide & Insecticide		-	-	-	-	-	-
Irrigation		-	-	-	-	-	-
Contract labour		-	-	-	-	-	-
Fuel costs (crop & forage)		6,744	8,530	5,784	4,026	5,687	6,154
Other crop and forage		3,419	3,291	3,082	2,982	2,960	3,147
Total Farm Costs (excludes unpaid labour)		224,786	229,475	223,696	190,158	193,321	212,287
Cash Costs (Total Farm Costs - Depreciation)		181,453	190,701	188,358	156,074	160,175	175,352
Depreciation & Opportunity Costs (including unpaid labour)		84,959	80,399	76,963	75,709	74,771	78,560
Total Economic Costs (cash, depr, opportunity)		266,412	271,100	265,321	231,783	234,946	253,912
Profits		2023	2022	2021	2020	2019	5-yr. avg.
Net Income (Total Revenue - Total Farm Costs + Change in Inv.)		18,345	(55,997)	(84,465)	(60,759)	(61,528)	(48,881)
Net Cash Farm Income (excludes depreciation)		61,626	(17,224)	(49,133)	(26,676)	(28,383)	(11,958)

† 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*	140	140	140	140	140	140
Average male and female calf price (\$/head)	1,906	1,315	1,019	1,061	1,076	1,275
REVENUE						
Cow Calf	1,714	1,217	973	902	920	1,145
Cull animals and slaughter receipts	188	132	109	109	114	130
Breeding livestock receipts	-	-	-	-	-	-
Calf Sales and transfer to retained ownership enterprise	1,427	985	763	793	805	955
Government payments	100.0	100.0	100.0	-	-	60.0
Other returns	-	-	-	-	-	-
Total Cow-Calf Revenue	1,714	1,217	973	902	920	1,145
VARIABLE COSTS						
Animal purchases	29.5	29.5	29.5	29.5	29.5	29
Feed (purchase feed, fertiliser, seed, pesticides)	253.3	244.1	380.0	221.1	213.9	262
Machinery (maintenance, depreciation, contractor)	275.3	247.4	227.4	220.3	214.5	237
Fuel, energy, lubricants, water	175.5	192.5	128.0	90.3	120.4	141
Vet & medicine	33.6	32.0	29.7	27.2	24.1	29
Other inputs cow calf enterprise	79.9	80.0	73.1	69.2	69.6	74
Labour						
Paid Labour	81.8	84.0	79.3	76.6	74.3	79
Unpaid Labour	365.9	375.7	354.8	342.6	332.5	354
Total Variable Costs	1,294.9	1,285.1	1,301.8	1,076.7	1,078.7	1,207
CAPITAL COSTS						
Insurance, taxes	111.7	115.0	108.8	105.0	101.9	108
Buildings (maintenance, depreciation)	124.0	116.9	108.4	104.5	103.4	111
Land Cost	-	-	-	-	-	-
Rented Land	266.5	257.9	251.0	247.7	245.5	254
Own Land	265.7	251.1	239.5	233.9	230.0	244
Capital Costs	-	-	-	-	-	-
Liabilities	162.9	222.8	164.2	150.0	166.8	173
Own capital	13.5	2.1	8.2	5.0	2.0	6
Total Capital Costs	944.3	965.7	880.1	846.2	849.5	897
COSTS						
Cash Costs	1,288.6	1,350.3	1,333.1	1,103.7	1,132.4	1,242
Depreciation Costs	305.4	271.7	246.3	237.7	231.3	258
Opportunity Costs	645.1	628.9	602.5	581.5	564.5	604
Total Production Costs	2,239.1	2,250.8	2,181.9	1,922.8	1,928.2	2,105
Profits						
	2023	2022	2021	2020	2019	5-yr. avg.
Short-term profit (cash costs)	425.9	(133.0)	(360.4)	(201.2)	(212.9)	(96)
Medium-term profit (cash + depreciation)	120.5	(404.6)	(606.7)	(438.9)	(444.1)	(355)
Long-term profit (cash + depreciation + opportunity)	(524.6)	(1,033.5)	(1,209.2)	(1,020.4)	(1,008.6)	(959)

*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\$.

Opportunity Costs

Opportunity costs are the non-cash costs that reveal the opportunity of using different resources. These costs can include Unpaid labour, renting out land, the opportunity of selling or buying feed production, and return to own capital.

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)	2023	2022	2021	2020	2019	5 yr. avg.
Pounds Weaned	55,217	55,217	55,217	55,217	55,217	55,217
Average male and female weaning weight (lbs)	533	533	533	533	533	
Average male and female calf price at weaning (\$/lb)	3.57	2.47	1.91	1.99	2.02	2.39
REVENUE						
Cow Calf Operation	4.35	3.09	2.47	2.29	2.33	2.90
Cull animals and slaughter receipts	0.48	0.33	0.28	0.28	0.29	0.33
Breeding livestock receipts	-	-	-	-	-	-
Calf Sales and transfer to retained ownership enterprise	3.62	2.50	1.94	2.01	2.04	2.42
Government payments	0.25	0.25	0.25	-	-	0.15
Other returns	-	-	-	-	-	-
Total Cow-Calf Revenue	4.35	3.09	2.47	2.29	2.33	2.90
VARIABLE COSTS						
Animal purchases	0.07	0.07	0.07	0.07	0.07	0.07
Feed (purchase feed, fertiliser, seed, pesticides)	0.64	0.62	0.96	0.56	0.54	0.67
Machinery (maintenance, depreciation, contractor)	0.70	0.63	0.58	0.56	0.54	0.60
Fuel, energy, lubricants, water	0.44	0.49	0.32	0.23	0.31	0.36
Vet & medicine	0.09	0.08	0.08	0.07	0.06	0.07
Other inputs cow calf enterprise	0.20	0.20	0.19	0.18	0.18	0.19
Labour						
Paid Labour	0.21	0.21	0.20	0.19	0.19	0.20
Unpaid Labour	0.93	0.95	0.90	0.87	0.84	0.90
Total Variable Costs	3.3	3.3	3.3	2.7	2.7	3.1
CAPITAL COSTS						
Insurance, taxes	0.28	0.29	0.28	0.27	0.26	0.28
Buildings (maintenance, depreciation)	0.31	0.30	0.27	0.26	0.26	0.28
Land Cost						
Rented Land	0.68	0.65	0.64	0.63	0.62	0.64
Owned Land	0.67	0.64	0.61	0.59	0.58	0.62
Capital Costs						
Liabilities	0.41	0.56	0.42	0.38	0.42	0.44
Own capital	0.03	0.01	0.02	0.01	0.01	0.02
Total Capital Costs	2.4	2.4	2.2	2.1	2.2	2.3
COSTS						
Cash Costs	3.27	3.42	3.38	2.80	2.87	3.15
Depreciation Costs	0.77	0.69	0.62	0.60	0.59	0.66
Opportunity Costs	1.64	1.59	1.53	1.47	1.43	1.53
Total Production Costs	5.68	5.71	5.53	4.88	4.89	5.34
Profits						
Short-term profit (cash costs)	1.08	(0.34)	(0.91)	(0.51)	(0.54)	(0.24)
Medium-term profit (cash + depreciation)	0.31	(1.03)	(1.54)	(1.11)	(1.13)	(0.90)
Long-term profit (cash + depreciation + opportunity)	(1.33)	(2.62)	(3.07)	(2.59)	(2.56)	(2.43)

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

Opportunity costs are the non-cash costs that reveal the opportunity of using different resources. These costs can include Unpaid labour, renting out land, the opportunity of selling or buying feed production, and return to own capital.

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

Open 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.

