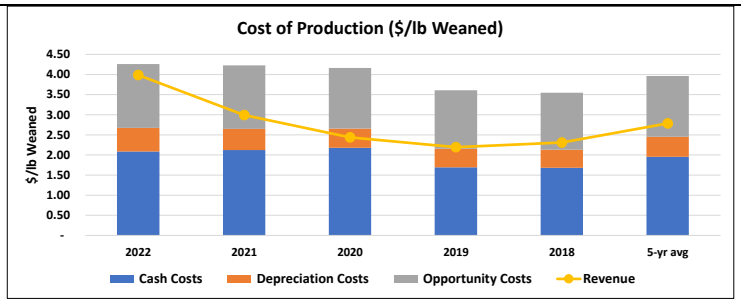
Farm Summary

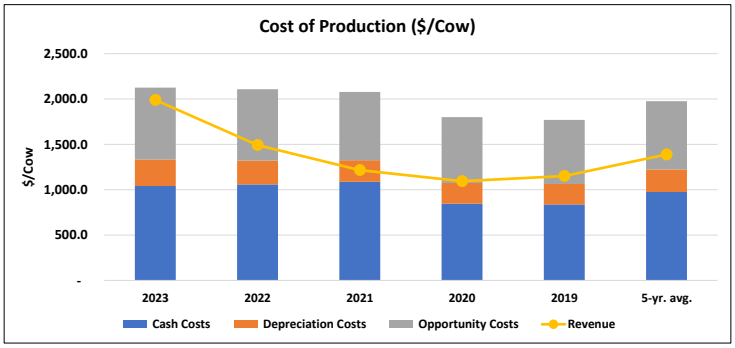
Farm Characteristics	*CA-SK-11b*
Farm Description	A cow-calf operation with 160 cows, utilizing predominantly homegrown feed.
Winter Feeding Ration (lbs/cow/day as fed)	165 days on barley silage (38 lb), hay (10 lb) and greenfeed (9lb)
Retained Ownership/Replacement Ration (lb/head/day as fed)	Replacements: 213 days on barley silage(30 lb), hay (5 lb) and pellets (4 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.

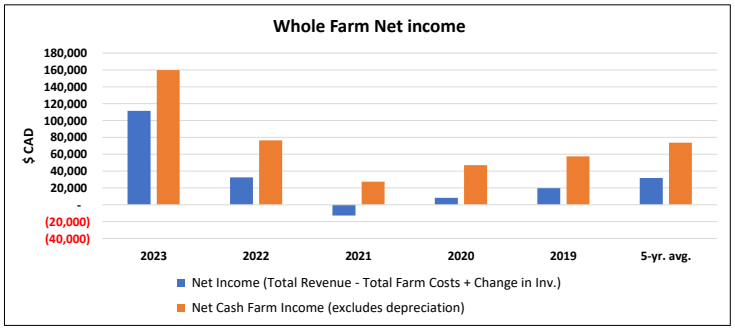
Environment	
Average Annual Temperature	2.5° C
Average Annual Precipitation (mm)	350-400
Ecoregion	Mixed Grassland
Stocking Rate (Animal Unit days per acre)	28
Fertilize Hay (yes/no)	No
Fertilize Pasture (yes/no)	No
Typical Hay Yield (tonnes/acre)	1.3
Grassland Acres (owned+rented)	2,229
Crop Acres (includes hay) (owned+rented)	342
Bush and other acres	0

Physical Performance Indicators	
Breed	Angus, Simmental, Hereford, Charolais
Cow:Bull Ratio	27:1
Bull Culling Rate (%)	17%
Mature Cow Weight (lb)	1,450
Heifer Retention for a steady herd (%)	10%
Cow Death Loss (%)	1.3%
Cow Culling Rate (%)	9.0%
Calves alive after 24hr/100 Cows exposed	93
Calf Death Loss (%) 24 hr to weaning	2%
Calves weaned per 100 cows exposed	91
Total Liveweight Sold per Cow (lb)	667
Weaning Weight (lb)	629
205 day adjusted Weaning Weight (lb)	587
Average Daily Gain pre-weaning (lb)	2.45
Weaning Weight as % of Cow Weight	43%

Production System	
Herd size	160
Days on field feeding (e.g. swath grazing)	0
Days supplemented on pasture	0
Days on full winter feed	165
Calving Start date	February 13
Weaning date	October 13
Sale date	October 13
Retained ownership	Replacements
% of feed purchased	2.1%
% 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)*

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Whole Farm Overview Page

Overview							
Operation Maturity	Medium						
Herd Size	160	Beef Animals Sold from Retained Ownership			N/A		
Paid Labour (livestock only) (hours)	186						
Unpaid Labour (livestock only) (hours)	2,933						
Average wages - paid and unpaid ($/hr)	25.40						

Revenue		**2023**	**2022**	**2021**	**2020**	**2019**	**5-yr. avg.**
Market Revenue	***5-yr avg***	***318,298***	***222,792***	***178,552***	***175,054***	***184,205***	***215,780***
Cow-Calf	93%	318,298	222,792	178,552	175,054	184,205	*215,780*
Cash Crops	0%	-	-	-	-	-	-
Retained Ownership	0%	-	-	-	-	-	-
Government Payments	3%	-	*16,000*	*16,000*	-	-	*6,400*
Other Farm Revenue ǂ	4%	10,040	10,001	10,001	10,002	10,015	10,012
Total Revenue	***100%***	***328,338***	***248,793***	***204,552***	***185,055***	***194,220***	***232,192***
Change in Inventory		-	-	-	-	-	-

Expenses	**2023**	**2022**	**2021**	**2020**	**2019**	**5-yr. avg.**
Depreciation	***48,292***	***43,844***	***40,233***	***38,785***	***37,828***	***41,796***
Machinery	24,228	21,063	18,931	18,279	17,670	*20,034*
Buildings	24,064	22,780	21,302	20,506	20,158	*21,762*
Quota econ. Accounting	-	-	-	-	-	-
Overhead costs	***55,983***	***55,215***	***49,165***	***45,591***	***45,923***	***50,375***
Land improvement	4,467	4,374	4,167	4,046	4,045	*4,219*
Machinery Maintenance	10,695	10,736	10,614	10,334	10,212	*10,518*
Buildings Maintenance	2,518	2,407	2,206	2,136	2,162	*2,286*
Contract labour	4,293	4,434	4,210	4,061	3,940	*4,187*
Diesel, Gasoline, Natural Gas	6,537	7,868	5,779	4,358	5,426	*5,994*
Electricity	7,903	5,466	3,315	2,439	2,387	*4,302*
Water	-	-	-	-	-	-
Farm insurance	6,801	7,025	6,670	6,434	6,242	*6,634*
Disability and accident insurance	1,281	1,323	1,256	1,212	1,176	*1,250*
Farm taxes and duties	5,640	5,825	5,530	5,335	5,176	*5,501*
Advisor costs	-	-	-	-	-	-
Accountant & legal fees	1,839	1,900	1,804	1,740	1,688	*1,794*
Phone & utilities	3,256	3,133	2,934	2,839	2,818	*2,996*
Other overhead costs	753	725	679	657	652	*693*
Wages, rent and interest payments	***40,920***	***45,424***	***39,071***	***33,519***	***31,460***	***38,079***
Paid Labour	5,012	5,176	4,914	4,741	4,599	*4,888*
Total land rents	21,894	20,407	19,229	18,658	18,262	*19,690*
Total Interest on debt	14,014	19,840	14,927	10,121	8,599	*13,500*
Cow-Calf	***39,274***	***37,649***	***59,030***	***32,093***	***30,343***	***39,678***
Animal purchases	6,533	6,533	6,533	6,533	6,533	*6,533*
Purchased feed	16,687	15,480	38,150	12,196	11,065	*18,716*
Other fixed and var. costs *	16,053	15,636	14,347	13,364	12,744	*14,429*
Retained Ownership	-	-	-	-	-	-
Animal purchases	-	-	-	-	-	-
Purchased feed	-	-	-	-	-	-
Other fixed and var. costs *	-	-	-	-	-	-
Crop and forage	***32,320***	***34,111***	***29,834***	***26,788***	***28,987***	***30,408***
Seed	8,382	7,297	7,518	7,140	7,786	*7,624*
Fertilizer	12,926	14,043	12,219	11,198	11,457	*12,369*
Herbicide	1,458	1,813	1,642	1,568	1,497	*1,596*
Fungicide & Insecticide	616	616	616	616	616	*616*
Irrigation	-	-	-	-	-	-
Contract labour	388	400	380	367	356	*378*
Fuel costs (crop & forage)	5,660	7,160	4,855	3,379	4,773	*5,165*
Other crop and forage	2,890	2,782	2,605	2,520	2,502	*2,660*
Total Farm Costs (excludes unpaid labour)	***216,788***	***216,242***	***217,333***	***176,777***	***174,541***	***200,336***
Cash Costs (Total Farm Costs - Depreciation)	168,497	172,398	177,100	137,991	136,713	158,540
Depreciation & Opportunity Costs (including unpaid labour)	122,795	118,347	114,736	113,289	112,331	116,300
Total Economic Costs (cash, depr, opportunity)	291,292	290,746	291,836	251,280	249,044	274,840

Profits	**2023**	**2022**	**2021**	**2020**	**2019**	**5-yr. avg.**
Net Income (Total Revenue - Total Farm Costs + Change in Inv.)	**111,550**	**32,551**	**(12,780)**	**8,279**	**19,679**	**31,856**
Net Cash Farm Income (excludes depreciation)	**159,801**	**76,393**	**27,452**	**47,063**	**57,492**	**73,640**

ǂ 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 ($/Cow)	2023	2022	2021	2020	2019	5 yr. avg.
No. of Cows*	160	160	160	160	160	160
Average male and female calf price ($/head)	2,157	1,495	1,199	1,172	1,231	*1,451*
REVENUE						
Cow Calf	1,989	1,492	1,216	1,094	1,151	1,389
Cull animals and slaughter receipts	261	192	155	155	165	186
Breeding livestock receipts	-	-	-	-	-	-
Calf Sales and transfer to retained ownership enterprise	1,728	1,200	961	940	986	1,163
Government payments	-	100.0	100.0	-	-	40.0
Other returns	-	-	-	-	-	-
Total Cow-Calf Revenue	1,989	1,492	1,216	1,094	1,151	1,389
VARIABLE COSTS						
Animal purchases	40.8	40.8	40.8	40.8	40.8	41
Feed (purchase feed, fertiliser, seed, pesticides)	296.4	290.0	418.2	245.5	243.5	299
Machinery (maintenance, depreciation, contractor)	240.1	219.2	202.2	195.5	190.9	210
Fuel, energy, lubricants, water	122.9	124.5	84.2	61.3	76.1	94
Vet & medicine	44.2	41.7	38.6	35.2	30.8	38
Other inputs cow calf enterprise	88.9	87.7	80.5	76.7	76.9	82
Labour						
Paid Labour	30.4	31.0	29.1	28.0	27.3	29
Unpaid Labour	459.7	468.7	440.3	424.3	412.7	441
Total Variable Costs	1,323.3	1,303.6	1,333.8	1,107.4	1,099.1	1,233
CAPITAL COSTS						
Insurance, taxes	86.9	89.1	84.1	81.1	78.8	84
Buildings (maintenance, depreciation)	161.1	150.7	139.1	133.9	132.3	143
Land Cost	-	-	-	-	-	
Rented Land	136.8	127.5	120.2	116.6	114.1	123
Own Land	208.5	198.5	190.6	186.8	184.1	194
Capital Costs	-	-	-	-	-	
Liabilities	84.9	119.0	88.7	59.8	51.0	81
Own capital	123.2	119.9	120.6	114.9	110.4	118
Total Capital Costs	801.5	804.8	743.4	693.1	670.7	743
COSTS						
Cash Costs	1,040.7	1,059.0	1,087.6	845.2	838.4	974
Depreciation Costs	292.6	262.3	238.1	229.3	224.2	249
Opportunity Costs	791.4	787.1	751.5	726.0	707.2	753
Total Production Costs	2,124.8	2,108.4	2,077.2	1,800.5	1,769.9	1,976
Profits	**2023**	**2022**	**2021**	**2020**	**2019**	**5-yr. avg.**
Short-term profit (cash costs)	948.6	433.4	128.3	248.9	312.9	414
Medium-term profit (cash + depreciation)	656.0	171.2	(109.8)	19.6	88.6	165
Long-term profit (cash + depreciation + opportunity)	(135.5)	(615.9)	(861.3)	(706.4)	(618.6)	(588)

*Model Maintains a stable herd size

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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 ($/lb Weaned)	2023	2022	2021	2020	2019	5 yr. avg.
Pounds Weaned	79,804	79,804	79,804	79,804	79,804	79,804
Average male and female weaning weight (lbs)	629	629	629	629	629	
Average male and female calf price at weaning ($/lb)	3.43	2.38	1.91	1.86	1.96	2.31
REVENUE						
Cow Calf Operation	3.99	2.99	2.44	2.19	2.31	2.78
Cull animals and slaughter receipts	0.52	0.39	0.31	0.31	0.33	0.37
Breeding livestock receipts	-	-	-	-	-	-
Calf Sales and transfer to retained ownership enterprise	3.47	2.41	1.93	1.88	1.98	2.33
Government payments	-	0.20	0.20	-	-	0.08
Other returns	-	-	-	-	-	-
Total Cow-Calf Revenue	3.99	2.99	2.44	2.19	2.31	2.78
VARIABLE COSTS						
Animal purchases	0.08	0.08	0.08	0.08	0.08	0.08
Feed (purchase feed, fertiliser, seed, pesticides)	0.59	0.58	0.84	0.49	0.49	0.60
Machinery (maintenance, depreciation, contractor)	0.48	0.44	0.41	0.39	0.38	0.42
Fuel, energy, lubricants, water	0.25	0.25	0.17	0.12	0.15	0.19
Vet & medicine	0.09	0.08	0.08	0.07	0.06	0.08
Other inputs cow calf enterprise	0.18	0.18	0.16	0.15	0.15	0.16
Labour						
Paid Labour	0.06	0.06	0.06	0.06	0.05	0.06
Unpaid Labour	0.92	0.94	0.88	0.85	0.83	0.88
Total Variable Costs	2.7	2.6	2.7	2.2	2.2	2.5
CAPITAL COSTS						
Insurance, taxes	0.17	0.18	0.17	0.16	0.16	0.17
Buildings (maintenance, depreciation)	0.32	0.30	0.28	0.27	0.27	0.29
Land Cost						
Rented Land	0.27	0.26	0.24	0.23	0.23	0.25
Owned Land	0.42	0.40	0.38	0.37	0.37	0.39
Capital Costs						
Liabilities	0.17	0.24	0.18	0.12	0.10	0.16
Own capital	0.25	0.24	0.24	0.23	0.22	0.24
Total Capital Costs	1.6	1.6	1.5	1.4	1.3	1.5
COSTS						
Cash Costs	2.09	2.12	2.18	1.69	1.68	1.95
Depreciation Costs	0.59	0.53	0.48	0.46	0.45	0.50
Opportunity Costs	1.59	1.58	1.51	1.46	1.42	1.51
Total Production Costs	4.26	4.23	4.16	3.61	3.55	3.96
Profits	**2023**	**2022**	**2021**	**2020**	**2019**	**5-yr. avg.**
Short-term profit (cash costs)	1.90	0.87	0.26	0.50	0.63	0.83
Medium-term profit (cash + depreciation)	1.32	0.34	(0.22)	0.04	0.18	0.33
Long-term profit (cash + depreciation + opportunity)	(0.27)	(1.23)	(1.73)	(1.42)	(1.24)	(1.18)

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