

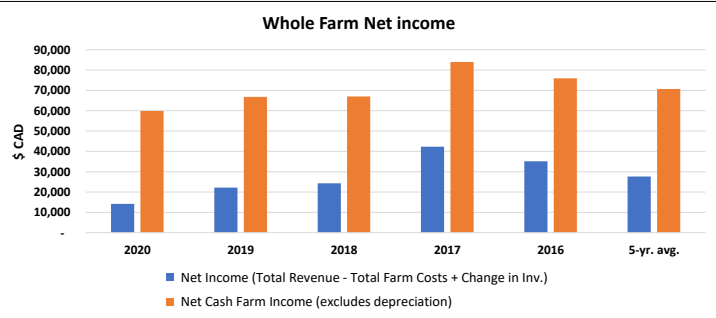
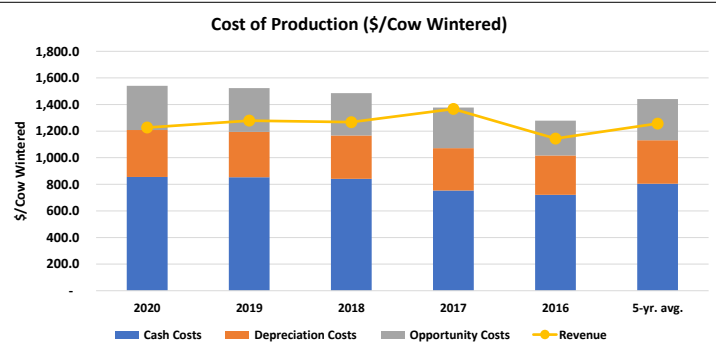
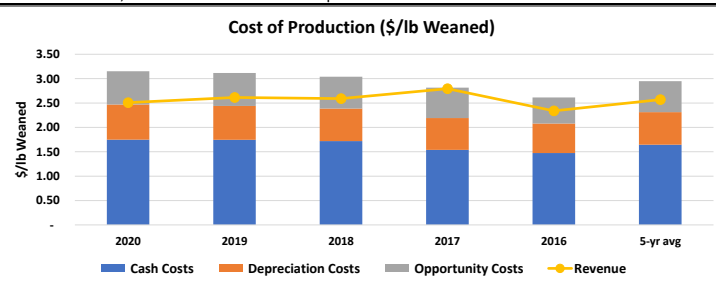


Farm Characteristics	CA-AB4
Farm Description	A mixed farm with cow-calf and cash crop production.
Winter Feeding Ration (lbs/cow/day as fed)	20 days of swath grazing followed by 191 days on winter feed with hay (21 lb), straw (7 lb) and greenfeed (15 lb), with mineral and salt (100 g)
Retained Ownership/Replacement Ration (lb/head/day as fed)	n/a
Disclaimer:	This benchmark is based on 4 farms of data; outliers were excluded as required

Environment	
Average Annual Temperature	3.5°C
Average Annual Precipitation (mm)	400-500 mm
Ecoregion	Fescue Grassland
Relief	Plain
Stocking Rate (Animal Unit days per acre)	43
Fertilize Hay (yes/no)	Yes
Fertilize Pasture (yes/no)	no
Hay Yield (tonnes/acre)	2.02
Grassland Acres (owned+rented)	299
Crop Acres (includes hay) (owned+rented)	491
Bush and other acres	0

Physical Performance Indicators	
Breed	Angus, Gelbvieh
Cow:Bull Ratio	18:1
Bull Culling Rate (%)	33%
Mature Cow Weight (lb)	1,369
Heifer Retention for a steady herd (%)	9%
Cow Death Loss (%)	1.9%
Cow Culling Rate (%)	8.1%
Calves alive after 24hr/100 Cows exposed	95%
Calf Death Loss (%) 24 hr to weaning	6.6%
Calves weaned per 100 cows exposed	87
Total Liveweight Sold per Cow (lb)	619
Weaning Weight (lb)	626
205 day adjusted Weaning Weight (lb)	551
Average Daily Gain pre-weaning (lb)	2.32
Weaning Weight as % of Cow Weight	46%

Production System	
Herd size	54
Days on field feeding (e.g. swath grazing)	20
Days supplemented on pasture	0
Days on full winter feed	191
Calving Start date	March 02
Weaning date	November 17
Sale date	November 17
Retained ownership	Replacements
% of feed purchased	0.5%
% of land in annual crops	62%
Annual sales Retained Cattle (head)	N/A
Placement weight (lbs)	#N/A
Sale Weight (lbs)	N/A
Days on Feed	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

NOTE: Feed costs are based on cost of production if homegrown.

Whole Farm Overview Page

Overview							
Operation Maturity	Mature						
Herd Size	54		Beef Animals Sold from Retained Ownership		N/A		
Paid Labour (hours)	-						
Unpaid Labour (hours)	408						
Average wages - paid and unpaid (\$/hr)	17.45						
Revenue		2020	2019	2018	2017	2016	5-yr. avg.
Market Revenue	5-yr avg	145,758	154,003	151,331	161,856	151,664	152,923
Cow-Calf	43%	66,262	69,079	68,456	73,790	61,781	67,874
Cash Crops	54%	79,497	84,924	82,875	88,066	89,882	85,049
Retained Ownership	0%	-	-	-	-	-	-
Government Payments	0%	-	-	-	-	-	-
Other Farm Revenue †	3%	4,901	4,903	4,902	4,904	4,903	4,903
Total Revenue	100%	150,659	158,906	156,234	166,761	156,567	157,825
Change in Inventory		-	-	-	-	-	-
Expenses		2020	2019	2018	2017	2016	5-yr. avg.
Depreciation		45,747	44,580	42,717	41,609	40,837	43,098
Machinery		23,829	23,035	21,704	21,020	20,590	22,036
Buildings		21,918	21,545	21,013	20,588	20,247	21,062
Overhead costs		6,996	6,934	6,713	6,353	6,199	6,639
Land improvement		-	-	-	-	-	-
Machinery Maintenance		580	570	547	533	519	550
Buildings Maintenance		984	999	978	930	905	959
Contract labour		1,382	1,341	1,283	1,228	1,205	1,288
Diesel, Gasoline, Natural Gas		512	569	584	512	457	527
Electricity		164	160	147	91	108	134
Water		-	-	-	-	-	-
Farm insurance		2,006	1,946	1,861	1,782	1,749	1,869
Disability and accident insurance		-	-	-	-	-	-
Farm taxes and duties		85	82	79	75	74	79
Advisor costs		308	298	285	273	268	287
Accountant & legal fees		-	-	-	-	-	-
Phone & utilities		916	909	892	872	858	889
Other overhead costs		59	59	57	56	55	57
Wages, rent and interest payments		11,684	12,751	11,523	9,785	8,598	10,868
Paid Labour		-	-	-	-	-	-
Unpaid Labour		7,282	7,198	7,255	7,327	6,534	7,119
Total land rents		6,625	6,438	6,338	6,131	5,275	6,161
Total Interest on debt		5,059	6,313	5,185	3,655	3,323	4,707
Cow-Calf		28,246	27,608	27,899	24,232	23,715	26,340
Animal purchases		4,013	4,013	4,013	4,013	4,013	4,013
Purchased feed		10,379	9,991	10,897	7,604	7,339	9,242
Other fixed and var. costs *		13,855	13,605	12,989	12,615	12,363	13,085
Retained Ownership		-	-	-	-	-	-
Animal purchases		-	-	-	-	-	-
Purchased feed		-	-	-	-	-	-
Other fixed and var. costs *		-	-	-	-	-	-
Crop and forage		43,836	44,825	43,083	42,451	42,072	43,253
Seed		12,432	13,231	12,291	12,229	11,687	12,374
Fertilizer		15,649	16,192	15,786	15,614	16,007	15,850
Herbicide		3,804	3,633	3,562	3,498	3,451	3,589
Fungicide & Insecticide		-	-	-	-	-	-
Irrigation		-	-	-	-	-	-
Contract labour		4,188	4,063	3,886	3,720	3,651	3,902
Fuel costs (crop & forage)		-	-	-	-	-	-
Other crop and forage		7,763	7,707	7,559	7,389	7,276	7,539
Total Farm Costs (excludes unpaid labour)		136,510	136,697	131,936	124,429	121,421	130,199
Cash Costs (Total Farm Costs - Depreciation)		90,763	92,117	89,218	82,821	80,584	87,101
Depreciation & Opportunity Costs (including unpaid labour)		53,029	51,778	49,972	48,935	47,371	50,217
Total Economic Costs (cash, depr, opportunity)		143,792	143,895	139,191	131,756	127,955	137,318
Profits		2020	2019	2018	2017	2016	5-yr. avg.
Net Income (Total Revenue - Total Farm Costs + Change in Inv.)		14,150	22,209	24,298	42,331	35,146	27,627
Net Cash Farm Income (excludes depreciation)		59,895	66,785	67,012	83,935	75,979	70,721

† 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 Wintered)	2020	2019	2018	2017	2016	5 yr. avg.
Cows Wintered *	54	54	54	54	54	54
Average male and female calf price (\$/head)	1,380	1,436	1,426	1,554	1,249	1,409
REVENUE	-	-	-	-	-	-
Cow Calf	1,227	1,279	1,268	1,366	1,144	1,257
Cull animals and slaughter receipts	142	149	144	144	160	147
Breeding livestock receipts	-	-	-	-	-	-
Calf Sales and transfer to retained ownership enterprise	1,085	1,130	1,124	1,223	985	1,109
Government payments	-	-	-	-	-	-
Other returns	-	-	-	-	-	-
Total Cow-Calf Revenue	1,227	1,279	1,268	1,366	1,144	1,257
VARIABLE COSTS	-	-	-	-	-	-
Animal purchases	74.3	74.3	74.3	74.3	74.3	74
Feed (purchase feed, fertiliser, seed, pesticides)	315.5	312.7	324.3	261.9	256.0	294
Machinery (maintenance, depreciation, contractor)	283.6	272.7	258.8	251.5	231.7	260
Fuel, energy, lubricants, water	43.2	42.8	39.0	38.8	37.3	40
Vet & medicine	68.5	66.5	63.6	60.9	59.7	64
Other inputs cow calf enterprise	137.9	136.4	132.6	128.3	124.7	132
Labour	-	-	-	-	-	-
Paid Labour	-	-	-	-	-	-
Unpaid Labour	134.9	129.3	124.7	120.5	105.5	123
Total Variable Costs	1,057.9	1,034.7	1,017.3	936.3	889.1	987
CAPITAL COSTS	-	-	-	-	-	-
Insurance, taxes	40.3	38.9	37.3	35.9	33.6	37
Buildings (maintenance, depreciation)	126.6	124.2	121.4	119.1	113.9	121
Land Cost	-	-	-	-	-	-
Rented Land	76.8	74.7	73.5	71.1	61.2	71
Own Land	63.7	61.5	60.3	57.7	50.7	59
Capital Costs	-	-	-	-	-	-
Liabilities	41.2	50.8	42.1	29.9	24.3	38
Own capital	134.6	138.8	134.1	127.0	105.9	128
Total Capital Costs	483.3	488.8	468.7	440.8	389.5	454
COSTS	-	-	-	-	-	-
Cash Costs	855.8	853.6	841.0	753.3	720.9	805
Depreciation Costs	352.1	340.4	325.9	318.5	295.7	327
Opportunity Costs	333.2	329.6	319.0	305.3	262.0	310
Total Production Costs	1,541.1	1,523.6	1,485.9	1,377.1	1,278.7	1,441
Profits	2020	2019	2018	2017	2016	5-yr. avg.
Short-term profit (cash costs)	371.2	425.6	426.7	613.2	423.2	452
Medium-term profit (cash + depreciation)	19.2	85.2	100.8	294.7	127.5	125
Long-term profit (cash + depreciation + opportunity)	(314.1)	(244.3)	(218.2)	(10.6)	(134.6)	(184)

*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

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)	2020	2019	2018	2017	2016	5 yr. avg.
Pounds Weaned	26,410	26,410	26,410	26,410	26,410	26,410
Average male and female weaning weight (lbs)	626	626	626	626	626	
Average male and female calf price at weaning (\$/lb)	2.20	2.29	2.28	2.48	1.99	2.25
REVENUE						
Cow Calf Operation	2.51	2.62	2.59	2.79	2.34	2.57
Cull animals and slaughter receipts	0.29	0.30	0.29	0.29	0.33	0.30
Breeding livestock receipts	-	-	-	-	-	-
Calf Sales and transfer to retained ownership enterprise	2.22	2.31	2.30	2.50	2.01	2.27
Government payments	-	-	-	-	-	-
Other returns	-	-	-	-	-	-
Total Cow-Calf Revenue	2.51	2.62	2.59	2.79	2.34	2.57
VARIABLE COSTS						
Animal purchases	0.15	0.15	0.15	0.15	0.15	0.15
Feed (purchase feed, fertiliser, seed, pesticides)	0.65	0.64	0.66	0.54	0.52	0.60
Machinery (maintenance, depreciation, contractor)	0.58	0.56	0.53	0.51	0.47	0.53
Fuel, energy, lubricants, water	0.09	0.09	0.08	0.08	0.08	0.08
Vet & medicine	0.14	0.14	0.13	0.12	0.12	0.13
Other inputs cow calf enterprise	0.28	0.28	0.27	0.26	0.25	0.27
Labour						
Paid Labour	-	-	-	-	-	-
Unpaid Labour	0.28	0.26	0.25	0.25	0.22	0.25
Total Variable Costs	2.2	2.1	2.1	1.9	1.8	2.0
CAPITAL COSTS						
Insurance, taxes	0.08	0.08	0.08	0.07	0.07	0.08
Buildings (maintenance, depreciation)	0.26	0.25	0.25	0.24	0.23	0.25
Land Cost						
Rented Land	0.16	0.15	0.15	0.15	0.13	0.15
Owned Land	0.13	0.13	0.12	0.12	0.10	0.12
Capital Costs						
Liabilities	0.08	0.10	0.09	0.06	0.05	0.08
Own capital	0.28	0.28	0.27	0.26	0.22	0.26
Total Capital Costs	1.0	1.0	1.0	0.9	0.8	0.9
COSTS						
Cash Costs	1.75	1.75	1.72	1.54	1.47	1.65
Depreciation Costs	0.72	0.70	0.67	0.65	0.60	0.67
Opportunity Costs	0.68	0.67	0.65	0.62	0.54	0.63
Total Production Costs	3.15	3.12	3.04	2.82	2.61	2.95
Profits	2020	2019	2018	2017	2016	5-yr. avg.
Short-term profit (cash costs)	0.76	0.87	0.87	1.25	0.87	0.92
Medium-term profit (cash + depreciation)	0.04	0.17	0.21	0.60	0.26	0.26
Long-term profit (cash + depreciation + opportunity)	(0.64)	(0.50)	(0.45)	(0.02)	(0.28)	(0.38)

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