#24-1 July 2025

2024 Results

In 2024, the Canadian Cow-Calf Cost of Production Network (COP Network) initiated the second round of data collection in British Columbia and Ontario, resulting in updated benchmark farms for both provinces. With this update, the COP Network now comprises 64 cow-calf benchmark farms, developed with participation from over 235 producers across Canada. These benchmarks represent a variety of production systems, including variation in animal performance, economies of scale, labour productivity, feeding, and farm financials. However, some production systems remain unrepresented in the COP Network, such as farms that primarily use by-product feedstuffs, organic/regenerative farms, and grass finishing operations.

The 2024 results presented in this report are estimated based on data from the baseline years (2019, 2020, 2021, 2022 or 2024), along with year-over-year indexing of provincial average yields, input and output prices, assuming stable herd sizes and consistent animal performance with the baseline years.

Key takeaways

For the cow-calf enterprise, total average costs were $1,850/cow in 2024, 5% higher than 2023. This was comprised of 59% ($1,094) in cash expenses, 13% ($244) depreciation, and 28% ($512) opportunity costs.

Average revenue was estimated at $2,012 per cow, up a significant 16% from 2023 thanks to sharply higher cattle prices.

With revenue growing faster than costs, profitability improved nationwide in 2024. All farms (100%) covered short-term (cash) costs, and a vast majority (95%) managed to cover medium-term (cash and depreciation) costs. About 59% of farms were able to cover long-term (cash, depreciation, and opportunity) costs. In comparison, in 2023, 95% of farms covered short-term costs, 91% covered medium-term costs, and about 50% covered long-term costs.

Next Steps

Over the next three years, the Canfax Research team will revisit focus group participants in Manitoba, Quebec, Maritimes (2026), Saskatchewan (2027) and Alberta (2028) to update structural data.

Introduction

The Canadian Cow-calf Cost of Production Network (COP Network) is the first nationally standardized data collection and reporting program. This allows for comparison both within and between provinces, as well as with cow-calf production systems worldwide.

Since the project launched in 2021, the COP Network has collected data from over 235 producers and generated benchmark farms that represent a variety of production systems. Each benchmark farm is based on data from three to seven producers with similar production systems and ecoregions.

Baseline data is captured every five years, focused on the typical farm structural and animal performance metrics such as yield, weaning weight, mature cow weights, etc. Annual indexing is then conducted for the subsequent years based on changes in provincial average input and output prices, as well as crop and forage yield.

In 2025, we launched the second round of data collection to track changes in operation structures and management practices over time. This process started with the 2024 production data from British Columbia (B.C.) and Ontario, with the remaining provinces scheduled for data collection over the next three years. The B.C. data was based on the *Cost and Returns of Sample Ranching Businesses in Various Areas of British Columbia – 2024*. In Ontario, data was collected by revisiting focus groups with existing COP Network participants.

Seven new benchmarks were developed for B.C., replacing the six from the previous cycle. In Ontario, three new benchmarks were established, along with one additional benchmark for the Northwest Ontario–Southeast Manitoba region, replacing the six previous Ontario benchmarks. This brings the total number of cow-calf benchmark farms to 64.

The combined dataset from these 64 farms is discussed below. All historical data have been updated to reflect this new set of benchmark farms. All this data, as well as individual farm summaries, can be found at canfax.ca.

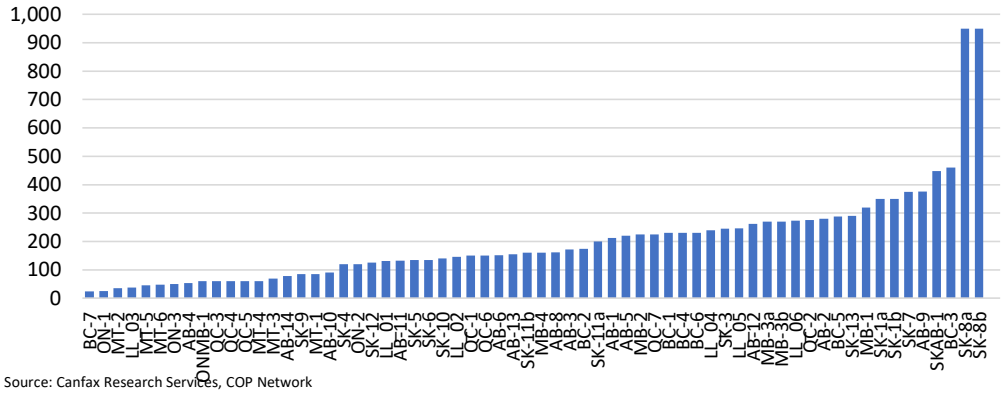
Geographic Locations, Herd Size and Animal Performance Metrics

The 64 cow-calf benchmarks are distributed across various ecoregions to provide national coverage. Specifically, the distribution includes seven cow-calf benchmark farms in B.C., 19 in Alberta (including six benchmarks from the Alberta Agri-system Living Lab), 15 in Saskatchewan, one in the Alberta-Saskatchewan region, five in Manitoba, three in Ontario, one in the Ontario Manitoba region, seven in Quebec, and six in Maritimes. Almost 63% (40 of 64) of these farms are in the prairies, where 84% of the Canadian beef cow herd is located[1].

The average **herd size** of the 64 benchmark farms is 202 beef cows, with a range from 24 head of beef cows to 950 head (Figure 1). The COP Network dataset is skewed towards small-and medium-sized farms. Twenty-eight percent of the benchmark farms have fewer than 100 cows, 28% have between 100 to 200 cows, 29% have between 200 and 300 cows, while only 14% have over 300 cows. This larger proportion of small-to-medium-sized farms aligns with national statistics. According to the 2021 Census of Agriculture, 95% cow-calf operation have less than 250 beef cows (Figure 2).

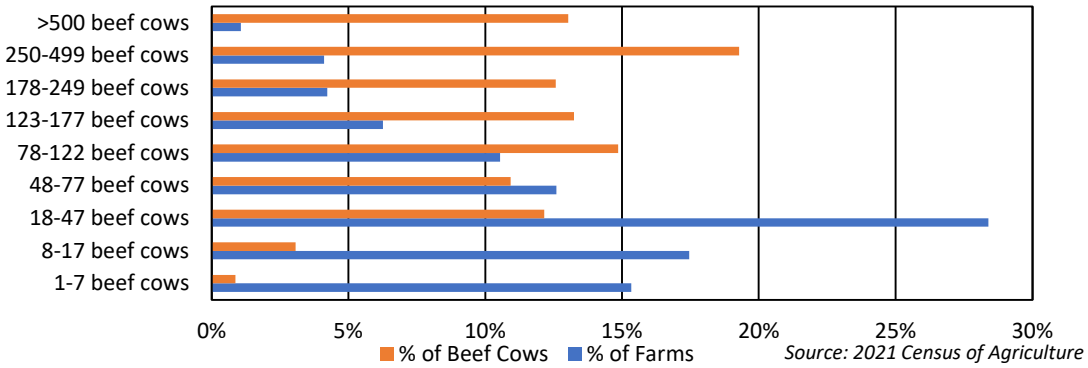
[1] Source: Statistics Canada. Table 32-10-0130-01 Number of cattle, by class and farm type (x 1,000), January 2025

Figure 1. Beef cow herd size on benchmark farms



Source: Canfax Research Services, COP Network

Figure 2. Profile of Canadian beef cattle operations by beef cow herd size



Source: 2021 Census of Agriculture

Animal performance metrics from the COP Network are compared to the 2023 Canadian Cow-Calf Survey (2023 CCCS), where applicable. These comparisons provide an indication of the robustness of the COP Network dataset and highlight where differences in the data occur. Limitations and assumptions associated with these differences should be kept in mind when interpreting the results of the COP Network. The heavier mature cow weights were associated with the purebred component of the benchmark operations (Table 1).

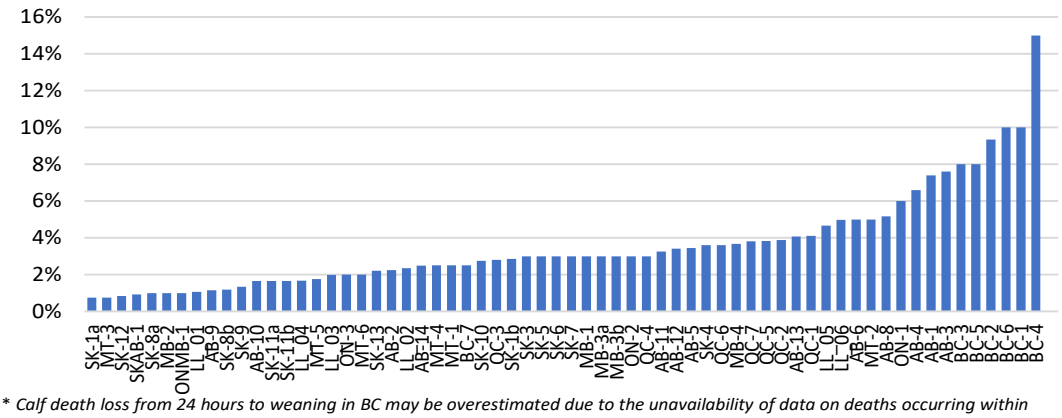
Table 1. Herd Size and Key Animal Performance Indicators

Metrics	Range	Average	CCCS, 2023	Difference
Herd Size (# of beef cows) (head)	24-950	202	--	--
Mature Cow weight (lbs)	1,200-1,600	1,358	1,387	-2%
Weaning weight (lbs)	444-708	559	577	-3%
205-day adjusted weaning weight (lbs)	459-687	547	554	-1%
Weaning wgt % of Mature cow weight	32-52%	41.2%	41.5%	-0.3%
Calf death loss 24 hrs to weaning *(% of live births)*	0.8%-15%	3.6%	2.5%	+1.1%
Replacement Rate (%)	5-19%	12%	--	--

For the COP Network, calf death loss is calculated for calves from 24 hours old to weaning. Calf death loss averaged 3.6% and ranged from as low as 0.8% to 15% The higher death loss can be related to predation, illustrating the influence geographic region may have on this metric (Figure 3). The calf death loss from 24 hours to weaning in B.C. may be inflated, as data on mortality within the first 24 hours after birth are not

available and therefore not excluded from the calculation. In comparison, calf death loss from 24 hours old to weaning was reported at 2.5% for calves born to cows and 2.9% for calves born to heifers in 2023 CCCS.

Figure 3. Calf death loss from 24 hrs to weaning (%) on benchmark farms*



** Calf death loss from 24 hours to weaning in BC may be overestimated due to the unavailability of data on deaths occurring within the first 24 hours after birth*

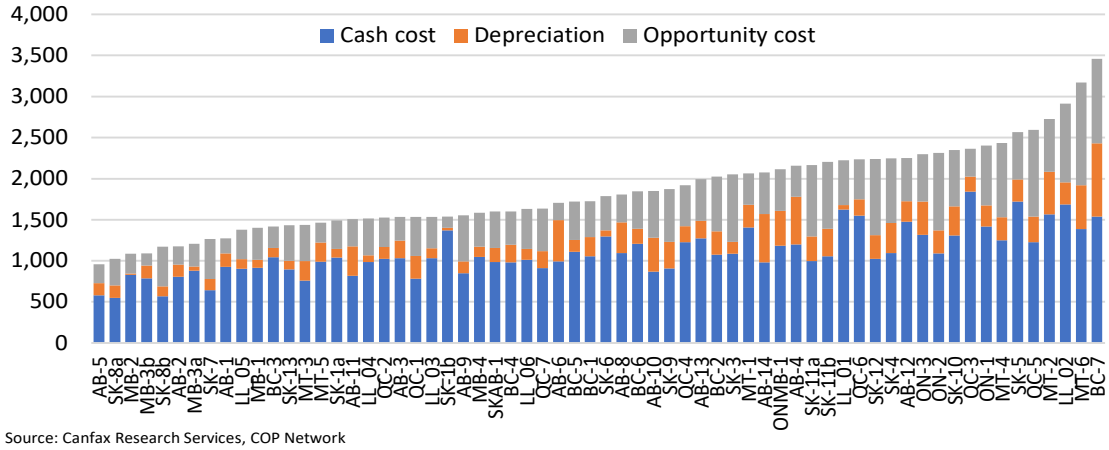
Source: Canfax Research Services, COP Network

Production Costs in 2024

Overall, total production costs per cow on the benchmark farms show an upward sloping curve (Figure 4), with both low-cost and high-cost production systems represented. In 2024, the average total cost rose to $1,850 per cow, up 5% from 2023. The increase was more pronounced in the East, where costs increased from 2023 by 7%, compared to a 4% increase in the West since 2023. While both regions experienced inflationary pressures, the more moderate increase in the West is partly attributed to improved forage yields in 2024, which reduced the need to purchase additional feed to compensate for shortfalls in homegrown supply.

Breaking down the total costs, 59% ($1,094) were cash costs, 13% ($244) depreciation, and 28% ($512) were opportunity costs. These are consistent with the previous year, which had 61% in cash costs, 11% in depreciation, and 28% in opportunity costs.

Figure 4. Total costs ($/cow) on benchmark farms in 2024

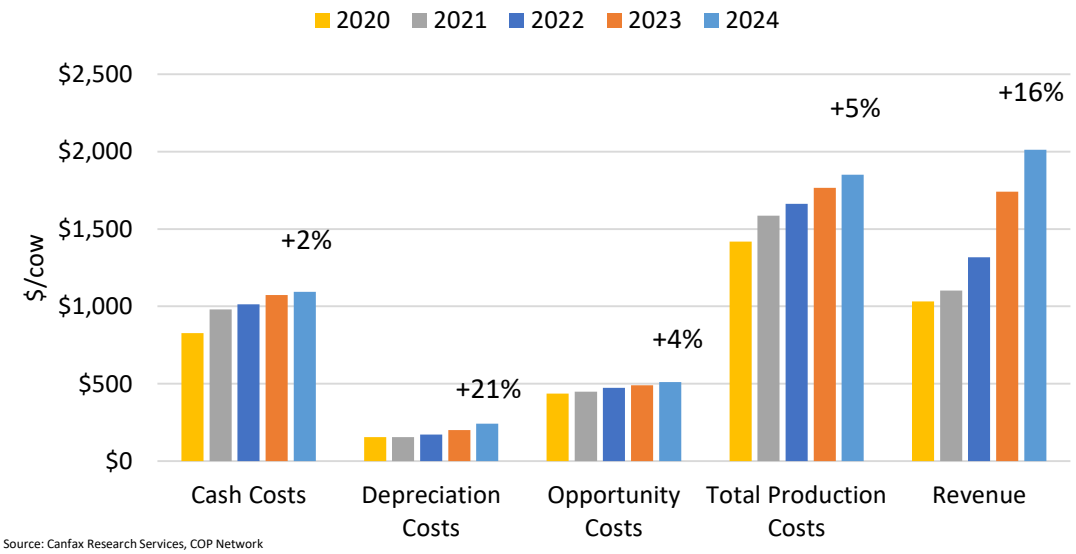


Source: Canfax Research Services, COP Network

Depreciation

One of the non-cash costs that can significantly impact profitability is depreciation. Depreciation is the value of an asset that decreases over time due to use, wear and tear or outdated. Although depreciation accounts for a smaller share of total costs (approximately 13%) compared to cash and opportunity costs, it has been rising more rapidly. In the past couple of years, depreciation costs have increased by 17% to 21% annually, outpacing the growth of both cash and opportunity costs.

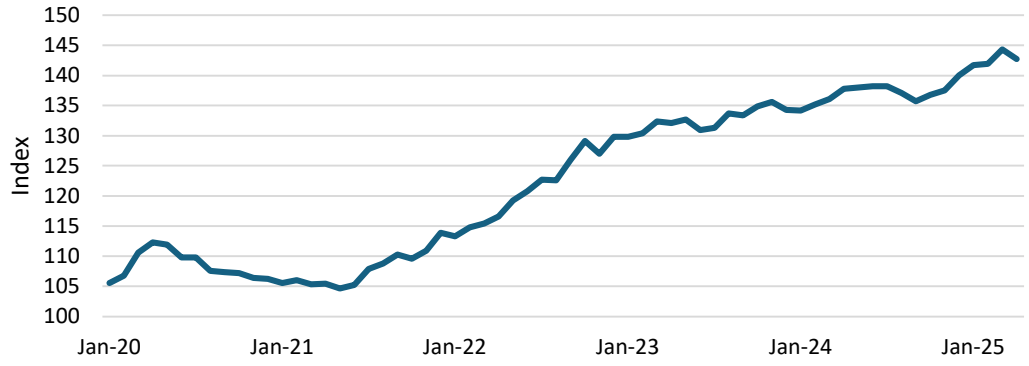
Figure 5. Canada Average Cost and Revenue in 2024



Source: Canfax Research Services, COP Network

With record high cattle prices and improved return, producers may be considering machinery and equipment upgrades. When coupled with the elevated machinery and equipment prices (Figure 6), these investments can contribute to a notable increase in depreciation expenses. Monitoring and understanding depreciation will be essential for accurately evaluating farm financial performance, supporting informed decision-making going forward.

Figure 6. Machinery and Equipment for Crop and Animal Production Price Index



Source: Statistics Canada. Table 18-10-0284-01

Feed costs and winter-feeding systems

A large proportion of cow-calf producers' total cost of production is associated with winter feed costs. The cost of purchased feed and fertilizer, seed, and pesticide for producing homegrown feed averaged $330/cow in 2024, steady with 2023 as expenses decreased slightly for fertilizer, energy and other input prices.

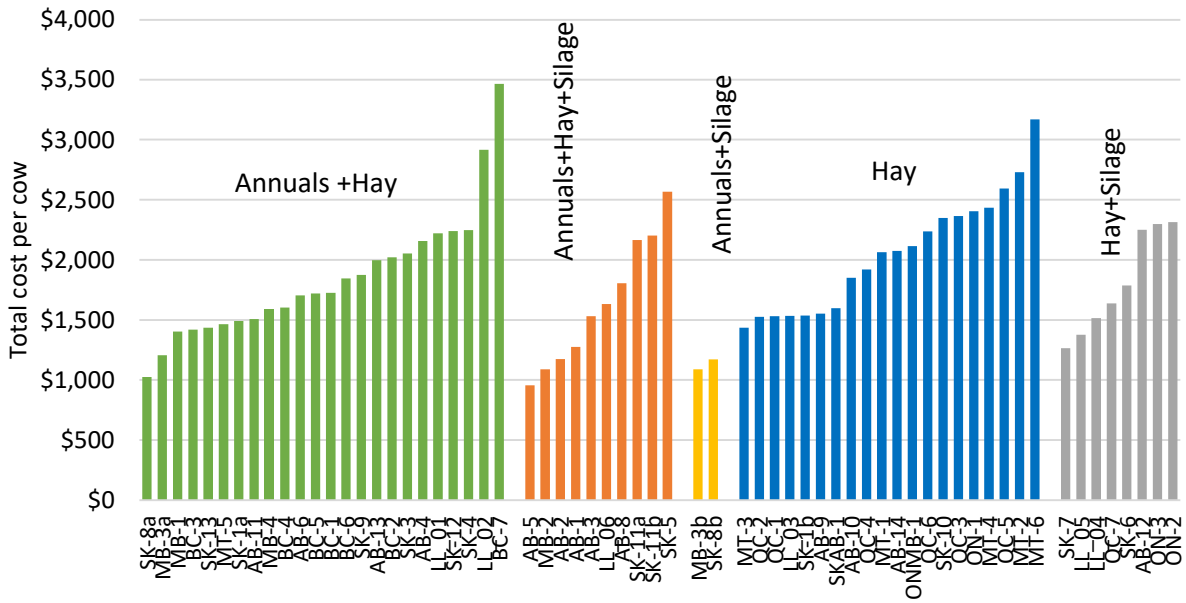
When machinery cost and fuel are taken into account, the average approximate feed cost[2] is estimated at $690/cow, up 5% from 2023. Approximate feed cost was up 3% or $20/cow in the West and up 9% or $64/cow in the East. Overall, 33% of the benchmark farms have approximate feed costs below $600/cow. The approximate feed costs made up 38% of total costs (cash + depreciation + opportunity costs) and 52% of medium-term costs (cash costs + depreciation) in 2024.

The benchmark farms were further categorized based on the primary forage used in the winter diet: annuals with silage, annuals with hay, annuals with hay and silage, hay alone, or hay with silage, where:

- Annuals include greenfeed, straw, swath graze, corn graze, crop residues
- Hay includes dry hay, haylage, grass silage
- Silage includes oats silage, barley silage, pea silage, corn silage

With the new benchmark farms in B.C. and Ontario, more operations now fall into the *Annuals and Hay* category compared to the previous data cycle. Overall, *'Annuals and Hay'* and '*Hay*' are the most common primary feed types among benchmark farms in the network.

Figure 7. Total costs ($/cow) by primary feedstuff on benchmark farms in 2024



Source: Canfax Research Services, COP Network

[2] Approximation of Feed Cost is calculated as feed cost (purchase feed + fertiliser, seed and pesticides for feed production) + machinery cost (machinery maintenance + depreciation + contractor) + fuel, energy, lubricants and water.

Figure 7 shows the total cost per cow across benchmark farms grouped by their primary winter feed types. A wide range of costs is observed within each group indicating significant variation in cost efficiency. While some of the lowest-cost farms are found in the *annuals with hay* category, this group also includes farms with some of the highest costs, underscoring the importance of management practices. Overall, this highlights that feed type alone does not determine cost level—rather, how feed is managed within each operation plays a critical role in influencing total costs.

Daily feed cost is calculated by dividing approximate feed cost by the number of total winter-feeding days, based on the assumption that most of the feeding and feed production costs are incurred during the winter-feeding period for the majority of benchmark farms, with the exception of year-round grazing operations. Table 2 presents the estimated daily feed costs for each benchmark farm. In general, farms that rely more heavily on purchased feed tend to have higher daily feed costs. Notably, the cost for SKAB-1, a year-round grazing operation, is likely overestimated due to its shorter winter-feeding period. In year-round grazing operations, costs related to machinery, fuel, and land are more likely associated with grazing management. Excluding SKAB-1, average daily feed cost in 2024 was estimated at $3.60/head/day, compared to $3.42/head/day in 2023.

Table 2. Winter feeding systems on benchmark farms in 2024

	Winter feeding days	Daily feed cost ($/head/day)	Primary feedstuff
BC-1	171	$3.23	Annuals/Hay
BC-2	181	$4.00	Annuals/Hay
BC-3	135	$3.20	Annuals/Hay
BC-4	167	$3.48	Annuals/Hay
BC-5	193	$2.75	Annuals/Hay
BC-6	229	$3.10	Annuals/Hay
BC-7	199	$5.74	Annuals/Hay
AB-1	250	$2.33	Annuals/Hay/Silage
AB-2	226	$2.19	Annuals/Hay/Silage
AB-3	234	$2.80	Annuals/Hay/Silage
AB-4	211	$5.03	Annuals/Hay
AB-5	235	$2.07	Annuals/Hay/Silage
AB-6	152	$5.41	Annuals/Hay
AB-8	238	$3.00	Annuals/Hay/Silage
AB-9	189	$2.21	Hay
AB-10	219	$2.85	Hay
AB-11	212	$3.32	Annuals/Hay
AB-12	194	$3.59	Hay/Silage
AB-13	242	$3.20	Annuals/Hay
AB-14	214	$4.15	Hay
SK-1A	222	$3.37	Annuals/Hay
SK-1B	150	$7.08	Hay
SK-3	180	$2.82	Annuals/Hay
SK-4	165	$4.23	Annuals/Hay
SK-5	200	$3.44	Annuals/Hay/Silage

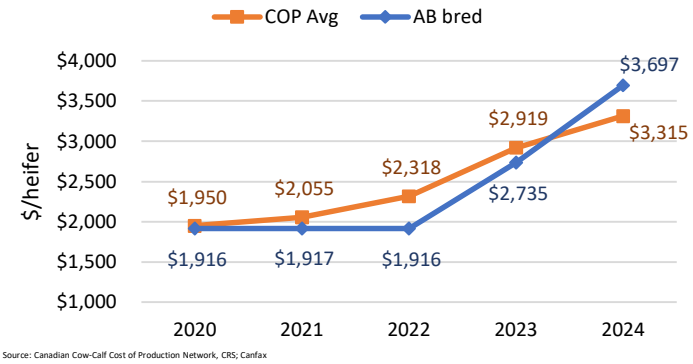
SK-6	186	$2.62	Hay/Silage
SK-7	180	$2.28	Hay/Silage
SK-8A	180	$2.23	Annuals/Hay
SK-8B	155	$2.64	Annuals/Silage
SK-9	205	$3.17	Annuals/Hay
SK-10	134	$5.61	Hay
SK-11A	165	$4.06	Annuals/Hay/Silage
SK-11B	165	$4.20	Annuals/Hay/Silage
SK-12	181	$3.76	Annuals/Hay
SK-13	165	$3.73	Annuals/Hay
SKAB-1	60	*$11.52	Hay
MB-1	200	$2.31	Annuals/Hay
MB-2	180	$2.51	Annuals/Hay/Silage
MB-3A	210	$2.93	Annuals/Hay
MB-3B	200	$2.83	Annuals/Silage
MB-4	150	$2.45	Annuals/Hay
ON-1	192	$3.90	Hay
ON-2	207	$3.06	Hay/Silage
ON-3	205	$4.17	Hay/Silage
ONMB-1	206	$4.40	Hay
QC-1	200	$2.62	Hay
QC-2	240	$2.97	Hay
QC-3	200	$5.86	Hay
QC-4	200	$4.50	Hay
QC-5	227	$3.29	Hay
QC-6	222	$3.82	Hay
QC-7	200	$3.07	Hay/Silage
MT-1	180	$4.99	Hay
MT-2	220	$4.40	Hay
MT-3	195	$2.61	Hay
MT-4	230	$3.62	Hay
MT-5	150	$2.98	Annuals/Hay
MT-6	210	$4.18	Hay
LL-01	151	$6.38	Annuals/Hay
LL-02	222	$5.18	Annuals/Hay
LL-03	218	$3.24	Hay
LL-04	197	$3.16	Hay/Silage
LL-05	200	$2.98	Hay/Silage
LL-06	203	$3.36	Annuals/Hay/Silage

** Year-round grazing operation. Approximate daily feed cost is overestimated due to the short winter-feeding period.*

Cost of Replacement Heifers

Record-high cattle prices are signaling the cow-calf sector to begin herd rebuilding as soon as forage becomes available. In 2024, the average cost of raising a replacement heifer across the 64 benchmark farms was estimated at $3,315 per head — 10% below the average Alberta bred heifer price of $3,697 per head (Figure 8). It's important to note that the bred heifer market surged in the fourth quarter of 2024 as demand increased.

Figure 8. Cost of Raising a Replacement Heifer 2020-2024



Source: Canadian Cow-Calf Cost of Production Network, CRS; Canfax

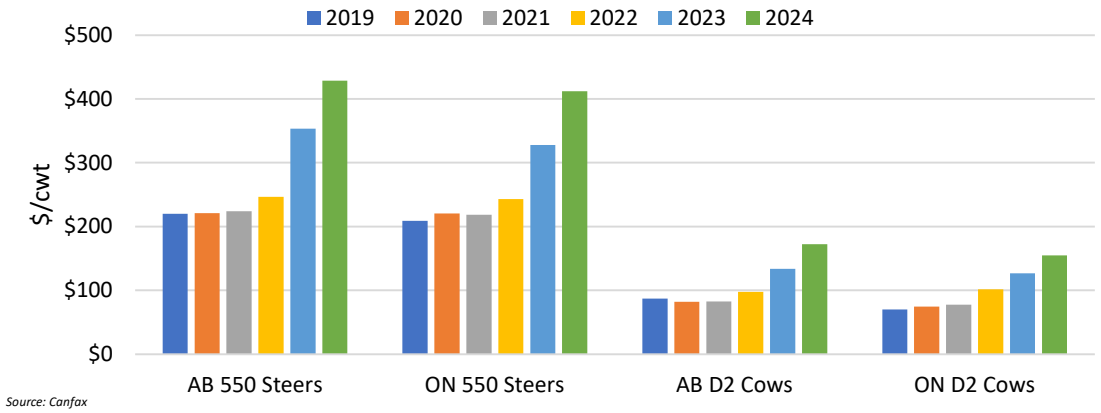
From 2020 to 2022, the cost of raising replacement heifers consistently exceeded Albera bred heifer prices. The largest gap occurred in 2022, when development costs were 21% above market prices. This was largely due to the lingering effects of drought, which limited feed availability and drove up feed costs for replacement heifers, while soft demand for breeding stock kept market prices subdued. In 2023, prices began to converge as bred heifer values increased, and by 2024, Alberta bred heifer prices surpassed the estimated cost. As calf prices reach record highs and forage conditions improved, more producers begin restocking. The bred female market is expected to remain strong.

In general, operations with higher replacement rates also face higher replacement costs, although exceptions do exist. Achieving a balance between managing herd age, maintaining productivity, and controlling replacement costs is essential to maximizing profitability.

Cow-calf revenue in 2024

Cattle prices reached new record highs in 2024, driven by tight cattle inventories and strong domestic and international demand for beef. Many producers experienced a significant boost in revenue. The average total revenue per cow rose sharply to $2,013, marking a significant 16% increase from the previous year's $1,740. This increase reflects higher calf prices across weight classes, as well as improved returns from cull cow and bull sales (Figure 9).

Figure 9. Annual steer calves and cow prices in Alberta and Ontario, 2019 to 2024



Source: Canfax

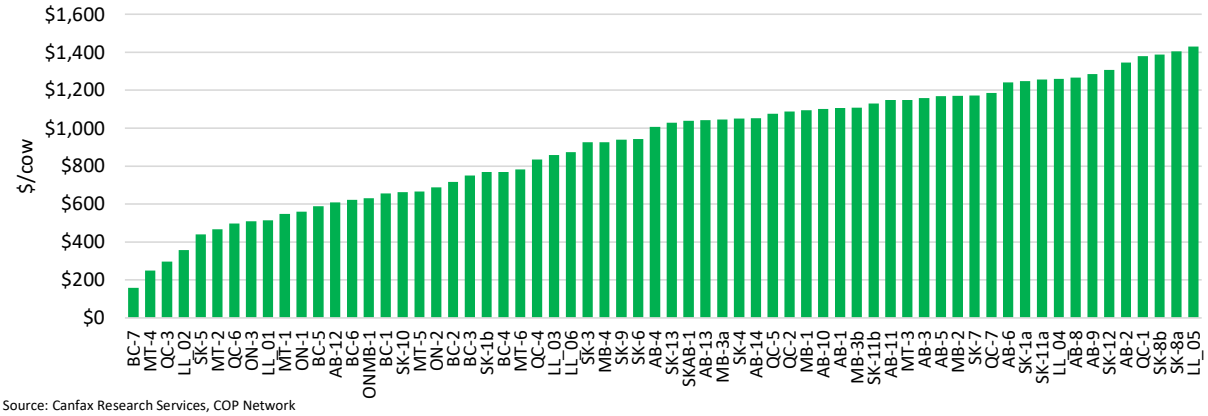
Cow-calf profitability

With revenue (+16%) growing faster than costs (+5%), profitability improved nationwide in 2024.

All benchmark farms (100%) covered short-term (cash) costs (Figure 10), and a vast majority (95%) managed to cover medium-term (cash and depreciation) costs (Figure 11). About 59% of farms were able to cover long-term (cash, depreciation, and opportunity) costs (Figure 12). In comparison, in 2023, 95% of farms covered short-term costs, 91% covered medium-term costs, and 50% covered long-term costs.

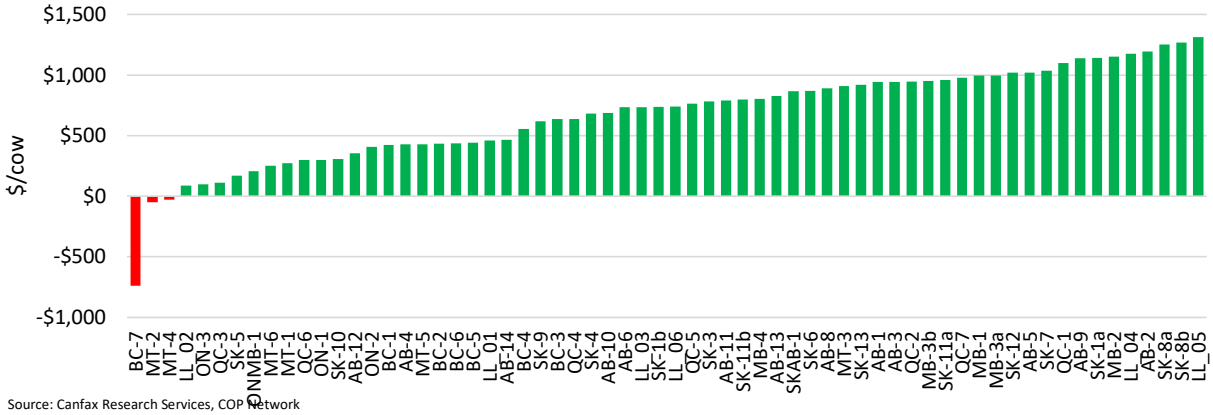
These gains reflect an overall improvement in cow-calf profitability, largely driven by record-high cattle prices. Despite the overall positive trend, profitability continues to vary widely across operations. Factors such as input costs, forage availability, herd size, and management practices all contribute to differences in individual outcomes.

Figure 40. Short-term profits (returns less cash costs) ($/cow) on benchmark farms in 2024



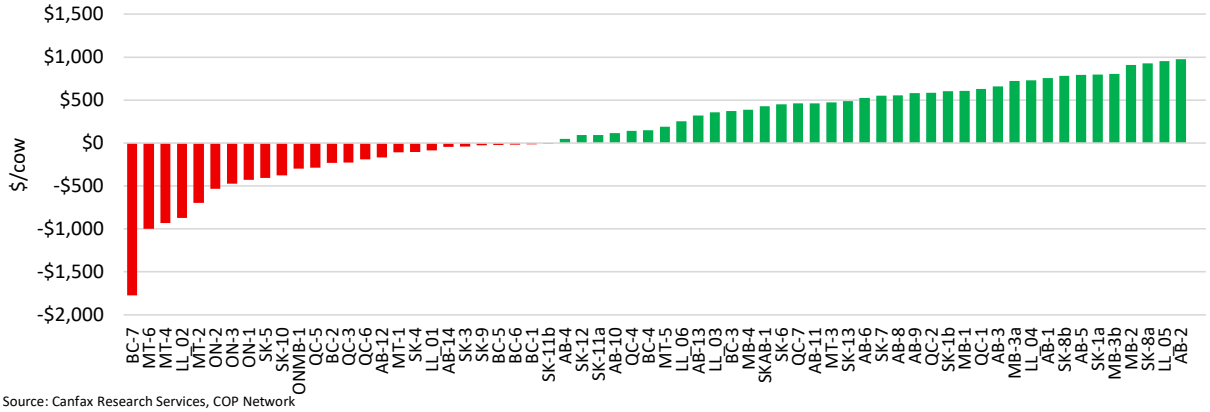
Source: Canfax Research Services, COP Network

Figure 11. Medium-term profits (returns less cash and depreciation costs) ($/cow) on benchmark farms in 2024



Source: Canfax Research Services, COP Network

Figure 12. Long-term profits (returns - cash, depreciation, and opportunity costs) ($/cow) on benchmark farms in 2024

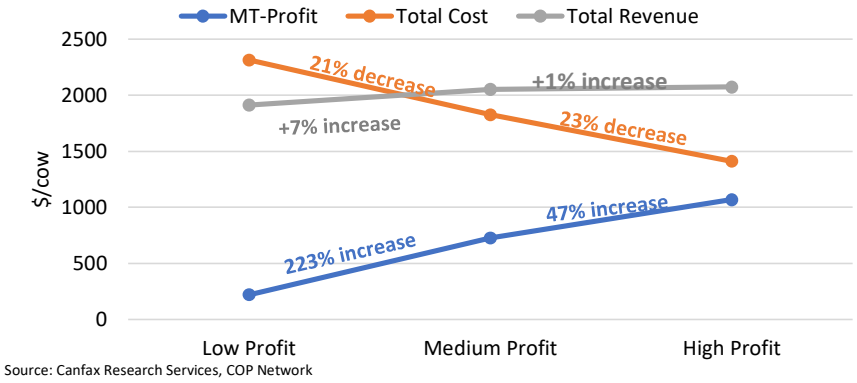


Source: Canfax Research Services, COP Network

Controlling Cost

The 64 benchmark farms were divided into three equal-sized groups by medium-term profit to compare their total production cost, revenue and medium-term profits. As shown in Figure 13, reducing total costs by 21% from the low-profit group to the medium-profit group and by 23% from the medium-profit to high-profit group was associated with a significant increase in profitability, shown by a 233% and 47% increase in medium-term profit, respectively. In contrast, total revenue showed only modest gains of 7% and 1%. This highlights that stronger profitability among top-performing operations is driven less by increasing revenue and more by effective cost management. Controlling expenses remains the key differentiator for achieving higher profitability.

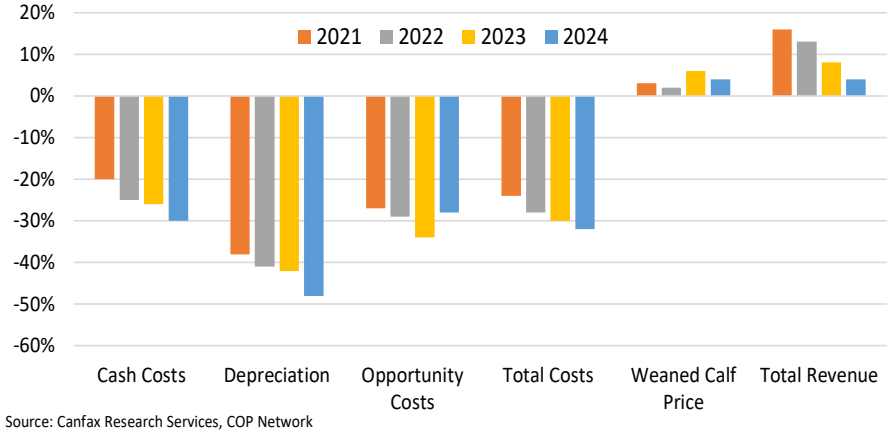
Figure 13. Medium-term profit, total cost and total revenue of low, medium and high profit groups



Source: Canfax Research Services, COP Network

A comparison of the top one-third most profitable farms with the bottom two-thirds from 2021 to 2024 (Figure 14) shows that top-performing farms consistently maintained total costs that were 24 to 32% lower than their lower-performing counterparts. This cost advantage was driven by sustained double-digit reductions in key areas such as cash costs, depreciation, and opportunity costs across all four years. In contrast, calf prices show only modest variation between the two groups, with differences ranging from 2 to 6%, underscoring the limited influence producers have over market prices. With elevated calf prices in recent years, the total revenue gap has narrowed—from 16% in 2021 to just 4% in 2024. These findings highlight the importance of strategic cost management in achieving and maintaining profitability.

Figure 14. Percent Difference Between Top 1/3 and Bottom 2/3



Source: Canfax Research Services, COP Network

Prepare for the next cattle cycle

At the bottom of the cattle cycle—characterized by minimal inventory levels and elevated market prices—cow-calf producers are presented with a unique set of strategic considerations aimed at optimizing long-term profitability. The shrinking in cattle supply numbers shifts market leverage toward cow-calf producers, enhancing revenue potential. Reinvestment of peak-phase profits into operational improvements, genetic advancement, or resource efficiency can serve as a proactive hedge against the cyclical nature of the cattle market. High prices do not last forever; lower prices will come with the next round of expansion. Thoughtful planning during this phase is essential to ensure sustainability and competitiveness as the industry transitions into the next phase of the cattle cycle.

References

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