

2026 Cost of Production

Beef Backgrounding



Guidelines For Estimating
Beef Backgrounding Costs
For Weight Range of 500 - 900 lbs
Based on 500 Head

Date: September, 2025

This guide is designed to provide you with planning information and a format for calculating costs of production of a backgrounding feeder calf enterprise in Manitoba. General Manitoba Agriculture recommendations are assumed in using feed and veterinary inputs. These figures provide an economic evaluation of the livestock and estimated prices required to cover all costs. Costs include labour, investment and depreciation, but do not include management costs, nor do they necessarily represent the average cost of production in Manitoba.

Backgrounding generally refers to the feeding of calves from weaning until they are put onto a high concentrate finishing ration. An example of a typical backgrounding operation would be, feed 500 pound steers to gain 1.5 to 2.5 pounds per day for approximately 100-200 days to produce 800 to 900 pound backgrounded feeders.

These budgets may be adjusted by putting in your own figures. As a producer you are encouraged to calculate your own costs of production. Good management is assumed in that a balanced ration is being fed, livestock are on a herd health program and handling facilities are included.

This tool is available as an Excel worksheet at:



[The Farm Machinery Custom and Rental Rate Guide](#) determine machinery costs.

is also available to help

Note: This budget is only a guide and is not intended as an in-depth study of the cost of production of this industry. Interpretation and use of this information is the responsibility of the user. If you need help with a budget, contact a Farm Management Specialist.

Backgrounding Cattle Production Cost Summary - September, 2025
Based on 500 feeders, weight range 500 to 900 lbs, Corn Silage ration @ 2.5 lbs. ADG

A. Operating Costs	Cost/Head	Total Cost	Your Cost
1. Feed Costs			
1.01 Alfalfa Grass Hay (57.8 % TDN, 13.7 % CP)	\$48.00	\$24,000	
1.02 Corn Silage (65.2 % TDN, 8.7 % CP)	\$79.80	\$39,920	
1.03 Barley Silage (63 % TDN, 11 % CP)	\$0.00	\$0	
1.04 Barley Grain (83.1 % TDN, 12.5 % CP)	\$77.08	\$38,439	
1.05 Greenfeed	\$0.00	\$0	
1.06 Straw	\$0.00	\$0	
1.07 32-20% Feedlot Suppl. (61.7%TDN, 35.6%CP)	\$0.00	\$0	
1.08 DDGS Corn/Wheat (77 % TDN, 33.9 % CP)	\$14.69	\$7,500	
1.09 1:1 Premix	\$0.00	\$0	
1.10 2:1 Premix	\$40.91	\$20,500	
1.11 Limestone	\$5.10	\$2,560	
1.12 Other	\$0.00	\$0	
Total Feed Costs	\$265.58	\$132,919	
2. Other Operating Costs			
2.01 Feeder Cost	\$3,415.25	\$1,707,625	
2.02 Straw	\$22.40	\$11,200	
2.03 Veterinary Medicine & Supplies	\$26.24	\$13,120	
2.04 Annual Fuel & Repair Costs	\$10.06	\$5,030	
2.05 Utilities	\$3.45	\$1,727	
2.06 Feeder Selling Cost	\$36.95	\$18,475	
2.07 Insurance	\$1.64	\$820	
2.08 Manure Removal	\$18.83	\$9,417	
2.09 Barn & Office Supplies	\$1.20	\$600	
2.10 Death Loss	\$71.80	\$35,900	
Subtotal Operating Costs	\$3,873.41	\$1,936,833	
2.11 Operating Interest	\$107.83	\$53,915	
Total Operating Costs	\$3,981.24	\$1,990,748	
B. Fixed Costs			
Buildings	\$11.54	\$5,769	
Machinery & Equipment	\$26.13	\$13,066	
Total Fixed Costs	\$37.67	\$18,835	
Total Operating and Fixed Costs	\$4,018.91	\$2,009,583	
C. Owners - Labour & Living	\$28.00	\$14,000	
Total Cost of Production	\$4,046.91	\$2,023,583	

Profitability and Breakeven Analysis

Estimated Farmgate	Per Head	Total
Gross Revenue @ \$455/cwt market price	\$3,972.15	\$1,986,075
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	Breakeven Purchase	Breakeven Selling
	Price (\$/cwt) @	Price (\$/cwt) @
	\$455/cwt market price	\$680/cwt feeder price
Operating Costs	\$678.18	\$456.04
Operating Costs & Labour	\$672.58	\$459.25
Operating & Fixed Costs	\$670.65	\$460.36
Total Costs	\$665.05	\$463.56
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	Cost per lb of	Marginal Returns per head
	gain sold (\$/cwt)	@ \$455/cwt market price
Feed Costs	\$71.20	\$291.32
Operating Costs	\$155.83	(\$9.09)
Operating Costs & Labour	\$163.34	(\$37.09)
Operating & Fixed Costs	\$165.93	(\$46.76)
Total Costs	\$173.43	(\$74.76)
<hr/>		
Yardage per Feeder per Day (based on 160 days)	\$0.805	
Return on Investment (ROI)	(1.8%)	
Estimated Return on Asset (ROA)	(16.2%)	

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Risk & Sensitivity Analysis (Stress Test)

Percent Market Price Change	-10.0%
Percent Feed Cost Change	5.0%
Percent Feeder Cost Change	5.0%

	Per Head
Market Price (\$ per cwt)	\$409.50
Feed Cost	\$278.86
Feeder Cost	\$3,586.01

Stress Test Scenario = Market Price Down 10%, Feed Price Up 5% and Feeder Cost Up 5%

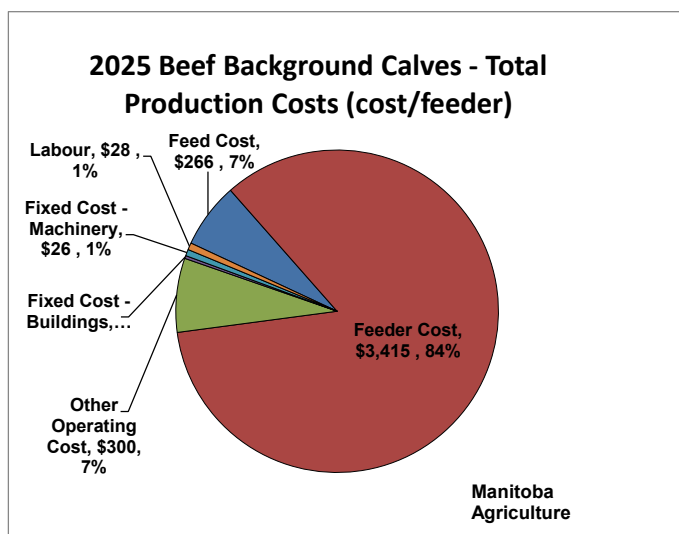
Operating Costs	\$4,165.28
Total Costs	\$4,230.95
Gross Revenue / feeder	\$3,574.94
Marginal Returns	
Over Operating Costs	(\$590.35)
Over Operating & Labour Costs	(\$618.35)
Over Total Costs (Net Profit)	(\$656.02)
Operating Expense Ratio	116.5%

Estimated Breakeven Canadian Dollar Analysis

	Est. Market Price (\$/cwt Cdn) @ 0.7300 Cdn per USD				
	\$445.00	\$450.00	\$455.00	\$460.00	\$465.00
Breakeven CDN Dollar (\$1 Cdn = \$ USD)					
Operating Costs	0.7123	0.7203	0.7283	0.7363	0.7443
Operating & Labour Costs	0.7074	0.7153	0.7232	0.7312	0.7391
Operating, Fixed & Labour Costs	0.7008	0.7086	0.7165	0.7244	0.7323

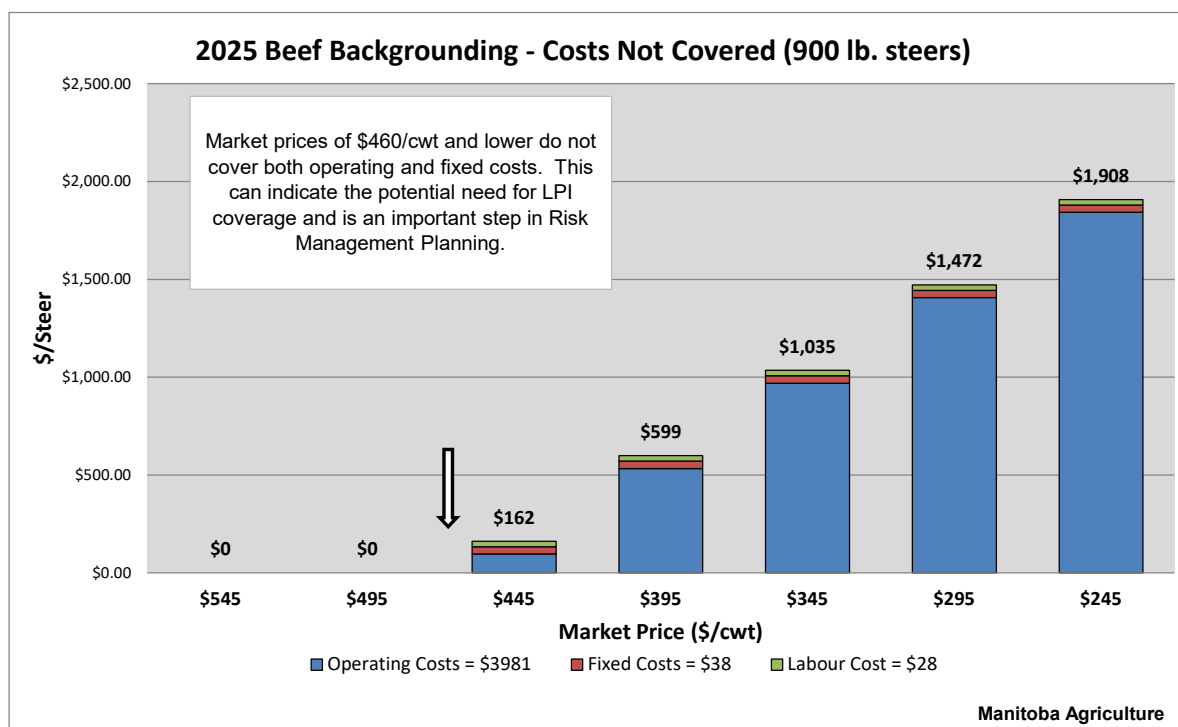
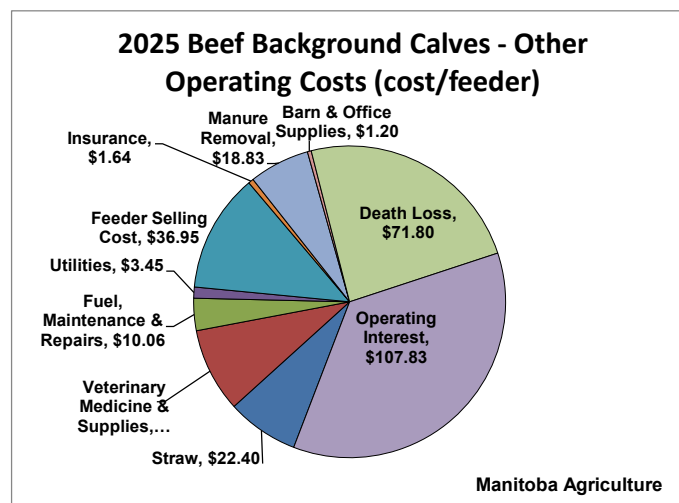
Breakeven Canadian Dollar = (Est. Market Price (\$/lb) x Shrunk Wt. (lbs) x \$ Cdn per USD) / Cost
 (eg. (\$4.55 x 873 lbs x \$0.7300) / \$4046.91) = \$0.7165

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Winter feed is a significant cost for background calves. A balanced ration to minimize cost per head per day is an important step in Risk Management Planning.

Operating interest, death loss and feeder selling costs are the most significant other background calf production costs.



Backgrounding Feeder Cattle Production Costs

Assumptions

1. This budget outlines the cost of production for backgrounding cattle.
2. Buildings and equipment are valued at new cost.
3. All feed is purchased.

Herd Profile

Number of Feeders Purchased	500	head
Feeder Cattle Mortality Rate	2.00	%
Feeder Purchased Weight	500	lbs
Feeder Cattle Price	\$680.00	/cwt
Finish Weight (Maximum 900 lbs.)	900	lbs
Feeder Selling Price (WLPPI insured value)	\$455.00	/cwt
\$1 Canadian Dollar (\$1.3699 CDN)	\$0.7300	/ \$1 USD
WLPPI Insurance Premium	\$0.00	/cwt
Percent Shrink at Sale	3.00	%

Average Daily Gain	2.50	lbs/day
Type of Feed Ration	Corn Silage	

(Analysis Assumed)							
<u>Feed Costs</u>	<u>\$/unit</u>	<u>lbs/Unit</u>	<u>\$/lb</u>	<u>lbs/feeder</u>	<u>\$/feeder</u>	<u>TDN</u>	<u>CP</u>
Alfalfa Grass Hay	\$120.00	2,000	0.060	800	\$48.00	57.8%	13.7%
Corn Silage	\$40.00	2,000	0.020	3,990	\$79.80	65.2%	8.7%
Barley Silage	\$50.00	2,000	0.025	0	\$0.00	63.0%	11.0%
Barley Grain	\$4.50	48	0.094	820	\$77.08	83.1%	12.5%
Greenfeed	\$115.00	2,000	0.058	0	\$0.00		
Straw	\$70.00	2,000	0.035	0	\$0.00		
32-20% Feedlot Suppl.	\$600	2,205	0.272	0	\$0.00	61.7%	35.6%
DDGS Corn/Wheat	\$250	2,205	0.113	130	\$14.69	77.0%	33.9%
1:1 Premix	\$50.00	55	0.909	0	\$0.00		
2:1 Premix	\$50.00	55	0.909	45	\$40.91		
Limestone	\$20.00	55	0.364	14	\$5.10		
Other	\$0.00	2,000	0.000	0	\$0.00		
					\$265.58		

FOOTNOTE: 1 bushel (bu) barley = 48 lbs = 21.8 kg
 1 kilogram (kg) = 2.2046 pounds (lbs)
 1 tonne (t) = 1,000 kg

<u>Weight Range</u>	<u>Days on Feed</u>	<u>Feed Cost</u> <u>\$/Steer/Day</u>
500 to 600 lbs.	40	\$1.420
600 to 700 lbs.	40	\$1.610
700 to 800 lbs.	40	\$1.734
800 to 900 lbs.	40	\$1.880
TOTAL	160	

Total Feed Cost per Steer	\$265.57 /feeder
Average Feed Cost per Day	\$1.66
Feed Cost per lb. of Gain Sold (shrunk weight)	\$0.712

Total Pounds of Gain	400 lbs
Total Pounds of Gain (Shrunk Weight)	373 lbs

Other Operating Costs**Feeder Purchase Costs**

Feeder		500 lbs/feeder	
	x	\$680.00 /cwt	
	÷	<u>100 lbs/cwt</u>	
	=	\$3,400.00 /feeder	
Buying Commission	+	\$5.00 /feeder	
Insurance fee	+	\$1.75 /feeder	
Trucking-in		\$1.70 /cwt	
	x	500 lbs/feeder	
	÷	<u>100 lbs/cwt</u>	
	=	\$8.50 /feeder	
Total	=	\$3,415.25 /feeder	

Straw Bedding

=	4.00 lbs/feeder/day
x	160.00 days on feed
<u>x</u>	\$70.00 /ton
=	\$22.40 /feeder

Veterinary Medicine & Supplies**Cattle Medication**

IBR,BVD,PI3,BRSV, Pasteurella		\$5.00	/feeder
Vitamin A-D	+	\$0.50	/feeder
External & Internal Parasites	+	\$0.72	/feeder
Blackleg & Haemophilus	+	\$1.26	/feeder
Growth Implants	+	\$2.00	/feeder
Antibiotics	+	<u>\$15.00</u>	/feeder
	=	\$24.48	/feeder

Herd Health Program**Professional Services**

	\$240.00 /hour charge
x	3.00 Total Yearly Hours
÷	<u>500.00 feeder cattle</u>
=	\$1.44 /feeder

Transportation

	\$1.00 Rate/km charge
x	80.0 Total Kilometres (round trip)
x	2 Number of Yearly Visits
÷	<u>500 feeder cattle</u>
=	\$0.32 /feeder
Total	= \$26.24 /feeder

Fuel, Oil, Repairs & Maintenance**Machinery Fuel Cost**

Tractor with Loader PTO hp			120
Average HP required	÷		2.5
Litres fuel / Hour / HP	x	0.1665576	
Tractor Hours Per Day (avg)	x		1.5
Diesel Fuel Cost / litre	x		\$1.20
Days on feed	<u>x</u>		<u>160</u>
Annual fuel cost		\$2,302.49	
	÷		<u>500</u> feeders
Total	=		\$4.60 /feeder

Machinery repair & maintenance

Machinery capital cost		\$112,500
Machinery Repair (% of investment cost)	\times	<u>1.20</u> %
Oil, repairs & maintenance	=	\$1,350.00
	\div	<u>500</u> feeders
Total	=	\$2.70 /feeder

Building repair & maintenance

Building capital cost		\$62,600
Building maintenance (% of inv.cost)	\times	<u>2.20</u>
Repairs & maintenance	=	\$1,377.20
	\div	<u>500</u> feeders
Total	=	\$2.75 /feeder

Utilities

Hydro - Rate		\$0.09587 / kWh
12 kWh per feeder		\$575.22
2 1000 watt waterer		\$552.21
Total Hydro		\$1,127.43
Telephone		\$600.00
	\div	500 feeders
Total	=	\$3.45 /feeder

Feeder Selling Cost**Trucking Cost**

Trucking Distance		75 miles
Rate		\$7.00 /loaded mile
		490 feeders
Average Weight		900 lbs/head
Truck Capacity		54,000 lbs/load
Number of head		60 per load
	=	9.00 loads
	\div	<u>500.00</u> feeders
	=	\$9.45 /feeder

Marketing Cost

MBP/NCO Levy		\$5.50 /feeder
LPI Insurance Premium		\$0.00 /feeder
Commission on Sales		\$22.00 /feeder
		\$27.50 /feeder
Total	=	\$36.95 /feeder

Manure Removal

Days on Feed	=	160 days
Manure volume produced	\times	0.024 m ³ /feeder/day
	=	3.84 m ³ manure volume
Manure volume shrinkage	\times	75 % volume shrink
	\times	1.30795 yd ³ per m ³
Cost for manure removal & application	\times	\$15.00 yd ³ manure removal cost
Total	=	\$18.83 /feeder

Insurance

Building & Equipment Capital Invested	=	\$192,600
Insurance Cost per \$100	x	\$0.40 \$/\$100
	÷	100
	÷	<u>500 feeder cattle</u>
	=	\$1.54 /feeder
Livestock Capital Invested	=	\$1,873,750 herd investment
Insurance Cost per \$100	x	\$0.00 \$/\$100
	÷	100
	÷	<u>500 feeder cattle</u>
	=	\$0.00 /feeder
Additional Coverage for Liability		\$49.00
	÷	<u>500 feeder cattle</u>
	=	\$0.10 /feeder
Total	=	\$1.64 /feeder

Barn & Office Supplies

Total yearly expense relating to barn		\$600
	÷	<u>500 feeder cattle</u>
Total	=	\$1.20 /feeder

Death Loss

		\$3,415.25 feeder cattle cost
	+	\$3,801.61 maximum value
	-	\$36.95 selling costs
	÷	2.00 average
	x	<u>2.00 % mortality rate</u>
Total	=	\$71.80 /feeder

Operating Interest

(Operating interest is charged on one half the subtotal operating costs)

		\$3,415.25 feeder cost
	+	\$229.08 ½ of feed & other costs
	x	6.75 % operating interest
	x	160.00 days on feed
	÷	<u>365.00 days /year</u>
	=	\$107.83 /feeder

FOOTNOTE: cwt = hundred-weight = 100 lbs

Labour Costs

Hours/Head		1.0 hours/feeder/year
Labour Rate	x	\$28.00 /hour
	=	\$28.00 /feeder

Fixed Costs							
<u>Buildings & Facilities</u>		<u>Machinery & Equipment</u>					
Total Investment (\$/feeder)	\$160	Total Investment (\$/feeder)	\$225				
Residual Value (End of Useful Life)	10%	Residual Value (End of Useful Life)	20%				
Useful Life (years)	20	Useful Life (years)	10				
Owned Building Equity	85%	Owned Machinery Equity	80%				
Building Financed (\$24 per feeder)	15%	Machinery Financed (\$45 per feeder)	20%				
Building Opportunity Cost (Investment Rate)	0.00%	Machinery Opportunity Cost (Investment Rate)	0.00%				
<u>Building & Water System Cost (\$/feeder)</u>		<u>Machinery & Equipment Cost (\$/feeder)</u>					
Finance Rate & Term	6.250% 7 Years	Finance Rate & Term	6.250% 7 Years				
Principle & Interest Cost	\$4.34	Principle & Interest Cost	\$8.13				
Building Depreciation Cost	\$7.20	Machinery Depreciation Cost	\$18.00				
Owned Building Opportunity Cost	\$0.00	Owned Machinery Opportunity Cost	\$0.00				
Total Cost	\$11.54	Total Cost	\$26.13				
Total Principle & Interest Cost (\$/feeder) \$12.47							
Total Principle & Interest Cost (500 feeders) \$6,235							
Total Fixed Investment \$192,600							
Capital Value							
Market		Cow-calf		Market		Cow-calf	
<u>Buildings & Facilities</u>	<u>Value</u>	<u>Usage %</u>	<u>Allocation</u>	<u>Machinery & Equipment</u>	<u>Value</u>	<u>Usage %</u>	<u>Allocation</u>
Windbreak Fence	\$6,300	100%	\$6,300	Miscellaneous Machinery	\$17,500	100%	\$17,500
Pens	\$5,300	100%	\$5,300	Tractor & Loader	\$175,000	30%	\$52,500
Handling Facilities	\$7,500	100%	\$7,500	Bale Shredder	\$25,000	50%	\$12,500
Waterers	\$6,000	100%	\$6,000	Tractor & Feed Wagon (silage)	\$60,000	50%	\$30,000
Gates	\$2,000	100%	\$2,000		\$0	100%	\$0
Feeders	\$1,500	100%	\$1,500		\$0	100%	\$0
Bunk Feeders	\$21,000	100%	\$21,000		\$0	100%	\$0
Well & Pressure System	\$8,000	100%	\$8,000		\$0	100%	\$0
Grain Bin	\$5,000	100%	\$5,000		\$0	100%	\$0
Landscaping	\$17,500	100%	\$17,500		\$0	100%	\$0
	\$0	100%	\$0		\$0	100%	\$0
	\$0	100%	\$0		\$0	100%	\$0
	\$0	100%	\$0		\$0	100%	\$0
	\$0	100%	\$0		\$0	100%	\$0
	\$0	100%	\$0		\$0	100%	\$0
	\$0	100%	\$0		\$0	100%	\$0
	\$0	0%	\$0		\$0	100%	\$0
Total Inv. = \$80,100 (\$160/feeder)				Total Inv. = \$112,500 (\$225/feeder)			

Breakeven Calculations

Cost per lb of gain sold (shrunk weight)

Feed Costs		\$265.58	feed cost	
	÷	<u>373</u>	<u>lbs gained weight</u>	
	=	\$0.71	/lb (gain sold)	
Operating Costs		\$3,981.24	operating costs	
	-	\$3,400.00	feeder cost	
	÷	<u>373</u>	<u>lbs gained weight</u>	
	=	\$1.56	/lb (gain sold)	
Operating & Labour Costs		\$4,009.24	operating costs	
	-	\$3,400.00	feeder cost	
	÷	<u>373</u>	<u>lbs gained weight</u>	
	=	\$1.63	/lb (gain sold)	
Operating & Fixed		\$4,018.91	oper. & fixed costs	
	-	\$3,400.00	feeder cost	
	÷	<u>373</u>	<u>lbs gained weight</u>	
	=	\$1.66	/lb (gain sold)	
Total Costs		\$4,046.91	total costs	
	-	\$3,400.00	feeder cost	
	÷	<u>373</u>	<u>lbs gained weight</u>	
	=	\$1.73	/lb (gain sold)	
Breakeven selling price (shrunk weight)				
Operating Costs		\$3,981.24	operating costs	
	÷	<u>873</u>	<u>lbs shrunk weight</u>	
	=	\$4.56	/lb	
Operating & Labour Costs		\$4,009.24	operating & labour	
	÷	<u>873</u>	<u>lbs shrunk weight</u>	
	=	\$4.59	/lb	
Operating & Fixed		\$4,018.91	oper. & fixed costs	
	÷	<u>873</u>	<u>lbs shrunk weight</u>	
	=	\$4.60	/lb	
Total Costs		\$4,046.91	total costs	
	÷	<u>873</u>	<u>lbs shrunk weight</u>	
	=	\$4.64	/lb	

Breakeven purchase price (shrunk weight)**Operating Costs**

	873	lbs shrunk weight	
x	\$455.00	\$/cwt selling price	
=	\$3,972.15	income	
-	\$581.24	operating less feeder cost	
÷	<u>500</u>	<u>lbs purchase weight</u>	
=	\$6.78	/lb	

Operating & Labour Costs

	873	lbs shrunk weight	
x	\$455.00	\$/cwt selling price	
=	\$3,972.15	income	
-	\$609.24	operating less feeder cost	
÷	<u>500</u>	<u>lbs purchase weight</u>	
=	\$6.73	/lb	

Operating & Fixed

	873	lbs shrunk weight	
x	\$455.00	\$/cwt selling price	
=	\$3,972.15	income	
-	\$618.91	op. & fixed less feeder cost	
÷	<u>500</u>	<u>lbs purchase weight</u>	
=	\$6.71	/lb	

Total Costs

	873	lbs shrunk weight	
x	\$455.00	\$/cwt selling price	
=	\$3,972.15	income	
-	\$646.91	total less feeder cost	
÷	<u>500</u>	<u>lbs purchase weight</u>	
=	\$6.65	/lb	

Profitability and Breakeven Analysis:

Gross Revenue = Shrunk weight (lbs) x \$/lb price (eg. 873 x \$4.55/lb = \$3972.15)

Return on Investment (ROI) = (Gross Revenue - Total Cost) / Total Cost
(eg. (\$3972.15 - \$4046.91) / \$4046.91 = -1.8%)

Return on Asset (ROA) = (Margin Over Operating - Labour - Building Depreciation - Machinery Depreciation) / (Building, Machinery & Equipment Investment / Herd Size) (eg. (\$-9.09 - \$28.00 - \$7.20 - \$18.00) / (\$192,600 / 500) = -16.2%)

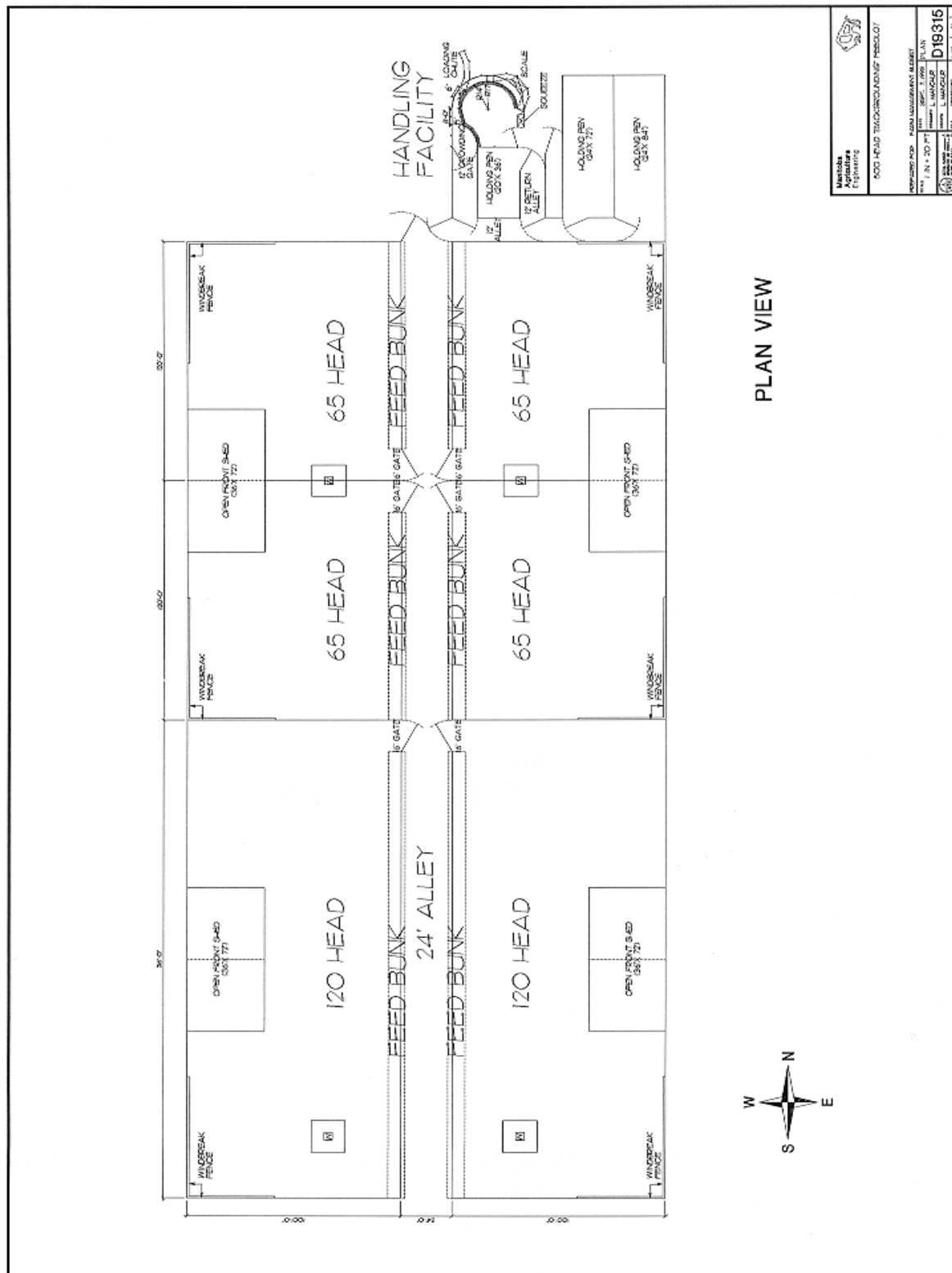
Yardage Cost Per Feeder Per Day = (\$22.40 straw + \$10.06 fuel & repair + \$1.54 building insurance + \$3.45 utilities + \$18.83 manure removal + \$7.20 building depreciation + \$18.00 machinery depreciation + \$4.34 building investment + \$8.13 machinery investment + \$5.70 operating interest + \$1.20 misc. + \$28.00 labour) ÷ 160 days = \$0.805

September, 2025**Contact Us**

For more information, contact a Farm Management Specialist.

- manitoba.ca/agriculture
- mbfarmbusiness@gov.mb.ca
- 1-844-769-6224

Backgrounding Feedlot Facilities





Contact us

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