





# Guidelines For Estimating **Beef Grassing Costs**Based on a 500 Head (Steers)

Date: April, 2024

This guide is designed to provide you with planning information and a format for calculating costs of production of a grass cattle enterprise in Manitoba. General Department 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.

Manitoba has an abundance of competively priced land suitable for pasturing cattle (ie. Community Pastures, Agricultural Crown Lands, private pastures, etc.). In this budget it is assumed that feeders are purchased in the spring and put in a feedlot for 60 days prior to being placed on pasture for an additional 90 days.

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:



<u>The Farm Machinery Cost of Production Guide</u> determine machinery costs.

is also available to help

#### Contact Us

For more information, contact a Farm Management Specialist.

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

**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.

Beef Grassing Co	ost Summary - Apri	l, 2024	
	Cost/head	Cost/cwt sold	Your Cost
A. Operating Costs			
1. Feed Costs:			
1.01 Ground Barley	\$18.75	\$2.22	
1.02 Hay	\$41.90	\$4.95	
1.03 Salt, Vitamins & Minerals	\$16.20	\$1.91	
Total Feed Costs	\$76.85	\$9.08	
2. Other Operating Costs:			
2.01 Feeder Cost (600 lb steer @ \$380/cwt)	\$2,292.30	\$270.96	
2.02 Yardage	\$56.00	\$6.62	
2.03 Rented Pasture	\$81.00	\$9.57	
2.04 Pasture Checking	\$1.60	\$0.19	
2.05 Veterinary Medicine & Supplies	\$16.75	\$1.98	
2.06 Insurance	\$4.89	\$0.58	
2.07 Selling Cost	\$87.06	\$10.29	
2.08 Death Loss	\$36.16	\$4.27	
Subtotal Operating Costs	\$2,652.61	\$313.55	
2.09 Operating Interest	\$91.45	\$10.81	
Total Operating Costs	\$2,744.06	\$324.36	
B. Fixed Costs			
3.01 Own Pasture Costs	\$0.00	\$0.00	
Total Operating & Fixed Costs	\$2,744.06	\$324.36	
C. Labour	\$5.18	\$0.61	
Total Costs Of Production	\$2,749.24	\$324.97	
Profitability and Breakev	en Analysis		
Estimated Farmgate	Per Head		
Gross Revenue @ \$320/cwt market price	\$2,707.20		
	Breakeven Purchase	Breakeven Selling	
	Price (\$/cwt) @	Price (\$/cwt) @	
	\$320/cwt market price	\$380/cwt market price	
Operating Costs	\$375.91	\$324.36	
Operating Costs & Labour	\$375.04	\$324.97	
Operating & Fixed Costs	\$375.91	\$324.36	
Total Costs	\$375.04	\$324.97	
	-	larginal Returns per hea	
		@ \$320/cwt market price	<u> </u>
Operating Costs	\$183.64	(\$36.86)	
Operating Costs & Labour	\$185.75	(\$42.04)	
Operating & Fixed Costs	\$183.64	(\$36.86)	
Total Costs	\$185.75	(\$42.04)	

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#### **Risk & Sensitivity Analysis**

	Per Head
A. Operating Costs	\$2,744.06
B. Fixed Costs	\$0.00
C. Labour	\$5.18
Total Costs	\$2,749.24

#### **Estimated Farmgate**

Price (\$ per cwt) \$320.00 Shrunk weight (lbs) 846

	Up	Down	
Percent Price Variation	5%	5%	
Percent Grasser Weight Variation	<b>2</b> %	2%	

Higher Price (\$ per cwt) \$336.00 Lower Price (\$ per cwt) \$304.00 Higher Grasser Weight 829.1

# Higher Margin Scenario - Price Up 5% and Grasser Weight Up 2%

\$2,899.41
\$155.35
\$150.17
\$155.35
\$150.17
94.6%

# Lower Margin Scenario - Price Down 5% and Grasser Weight Down 2%

Gross Revenue per Grasser	\$2,520.40	
Marginal Returns		
Over Operating Costs	(\$223.66)	
Over Operating & Labour Costs	(\$228.84)	
Over Operating & Fixed Costs	(\$223.66)	
Over Total Costs (Net Profit)	(\$228.84)	
Operating Expense Ratio	108.9%	

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# **Beef Grasser Cattle Production Costs**

## **ASSUMPTIONS:**

- 1. This Budget assumes all 500 animals are steers.
- 2. All feed is purchased.

# **HERD PROFILE**

Number of Feeders Purchased	<b>500</b>	head
Feeder Cattle Mortality Rate (%)	1.5	%
Feeder Purchased Shrunk Weight (lbs)	600	lbs
Feeder Cattle Price (\$/cwt)	<b>\$380</b>	\$/cwt
Finish Weight (lbs)	900	lbs
Percent Shrink (%) - out	<b>6.0%</b>	%
Shrunk Weight (lbs)	846	lbs
Feeder Selling Price	<b>\$320</b>	\$/cwt
LPI Insurance Premium	\$6.00	\$/cwt
Average Daily Gain Gross (lbs/day)	2.00	lbs/day
Average Daily Gain Net (lbs/day)	1.64	lbs/day
Total Days Fed	150	days
Days on Feed in Feedlot	60	days
Days on Pasture	90	days

(1) FOOTNOTE: 1 kilogram (kg) = 2.2046 pounds (lbs)

FEED COSTS	<u>Cost</u>	<u>Amount</u>
Ground Barley (\$/bu)	\$5.00	3.00 lbs/day
Hay (\$/tonne)	\$110.00	<b>14.00</b> lbs/day
Salt, Mineral etc,(\$/lb)	\$0.90	18.00 lbs/YEAR

# **OTHER OPERATING COSTS**

Feeder Purchase Costs	
Buying Commission per CWT	\$1.00
Trucking in Cost	
Average Weight	600 lbs/head
Distance	75 miles
Rate	<b>\$7.00</b> /loaded mile
Truck Capacity	<b>54,000</b> lbs/load
Number of head per load - calves	<b>90</b> per load
•	-

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Cost/head/day	\$0.80
Initial Chute fee \$/head	\$8.00

Veterinary Medicine & Supplies: Cattle Medication: Tagging - 5% retagging cost Vitamin A-D External & Internal Parasites Blackleg 7 way Growth Implants Antibiotics Vaccine 5 Way	\$0.25 \$0.00 \$1.25 \$0.83 \$3.42 \$7.00 \$4.00
Trucking Out Cost Average Weight Distance Rate Truck Capacity Number of head per load - calves	900 lbs/head 75 miles \$7.00 /loaded mile 54,000 lbs/load 60 per load
Marketing Cost: Commission on Sales \$/head Insurance fee \$/head Checkoff \$/head	\$20.00 \$1.35 \$5.50
Insurance: Cost per \$100 Capital Invested in: a). Livestock b). Building & Equipment Additional Coverage for Liability	\$0.21 \$0.00 \$49.00
Operating Interest Rate (%) Investment Interest Rate (%)	9.00 2.50
PASTURE COSTS Land Value per Acre Property Taxes per Acre Carrying Capacity per Head (acres/head) Pasture rental - cost per head per day	\$0.00 \$0.00 2.5 \$0.90
Pasture checking costs (ie fuel)	\$800
LABOUR COSTS Feedlot Labour - hours/day Pasture Labour - hours/day Labour Rate/Hour	1.00 0.40 \$27.00

# Assumptions

- 1. Gross Average daily gain (ADG) is assumed to be 2 lbs/day. Net ADG is 1.64 lbs/day.
- 2. It is assumed that the feeder steer weighs in at 600 lbs. and is raised to 900 lbs. (846 lbs. after 6% shrink).
- 3. Cattle are on feed for 150 days; the first 60 days in a feedlot and the remaining 90 days on pasture.
- 4. Assumed 500 head of cattle on feed and pasture.

# **Beef Grasser Production Cost Worksheet**

A. OPERATING COSTS				Your Cost
1. Feed Costs: 1.01 Ground Barley				<u>1001 0001</u>
Greana Zaney		60	days on ground barley	
	х	3.00		
	=	3.75	bushels fed	
	<u>x</u>	\$5.00		
	<u>-</u>	\$18.75	/feeder	
1.02 Hay				
•		60	days on hay	
	Х	14.00		
	=	0.38	tonnes fed	
	<u>X</u>	\$110.00	/tonne	
	= -	\$41.90	/feeder	
1.03 Salt, Vitamins & Mir	erals			
		18.00	lbs/feeder/year	
	<u>X</u>	\$0.90	/lb	
	=	\$16.20	/feeder	
Total Feed Cost		\$76.85	/feeder	
2. Other Operating Costs:				
2.01 Feeder Cattle Cost				
Commission		\$1.00	\$/cwt	
	Χ	600	lbs/feeder	
	<u> </u>	100	lbs/cwt	
	= _	\$6.00	/feeder	
Trucking-in		75.00	miles	
<u> </u>		\$7.00	/loaded mile	
		500	feeders	
		6	loads	
	<u> </u>	500	feeders	
	= _	\$6.30	/feeder	
Feeder		600	lbs/feeder	
	Х	\$380.00	\$/cwt	
	<u>÷</u> –	100	lbs/cwt	
	= -	\$2,280.00	/feeder	
Total Cost		\$2,292.30	/feeder	

## **Your Cost**

	uage (iliciuues s	traw	, repairs, util	ities, supplies & depreciat	ion)
	Yardage		\$0.80	cost/head/day	
	J	<u>X</u>	60	days on feed	
		=	\$48.00	/feeder	
	Chute fee	=	\$8.00	/feeder	
			,		
	Total Yardage	=	\$56.00	/feeder	
2.03 Ren	ited Pasture				
			\$0.90	cost/head/day	
		<u>X</u>	90	days on pasture	
		=	\$81.00	/feeder	
2.04 Pas	ture Checking				
			\$800	cost per year	
		<u>÷</u>	500	head	
		=	\$1.60	/feeder	
2.05 Vete	erinary Medicine	& S	upplies		
	=		\$0.25	/Tagging	
		+	\$0.00	/Vitamin	
		+	\$1.25	/Parasites	
		+	\$0.83	/Blackleg 7 way	
		+		/Growth Implant	
		+	\$7.00	/Antibiotics	
		<u>+</u>	\$4.00	/Vaccine 3 way	
		=	\$16.75	/feeder	
2.06 Inst	urance				
			\$2,280.00	feeder cost	
		Χ	\$0.21	cost/\$100 capital	
		÷	100	/\$100	
		=	\$4.79	/feeder	
			<b>#</b> 40	a delitation and a second and the little	1114.
			\$49	additional coverage for liab	ility
		÷	500	feeder cattle	
			ΦΩ 4Ω		
		=	\$0.10	/feeder	
	Total	=	•		
	Total	=	\$0.10 <b>\$4.89</b>	/feeder	
2.07 Fee		=	•		
2.07 Fee	der Selling Cost	=	\$4.89		
2.07 Fee		=	•	/feeder	
2.07 Fee	der Selling Cost	=	<b>\$4.89</b> 75.00	/feeder miles	
2.07 Fee	der Selling Cost	=	<b>\$4.89</b> 75.00 \$7.00	/feeder miles /loaded mile	
2.07 Fee	der Selling Cost	= = s	75.00 \$7.00 500.00 9.00	/feeder miles /loaded mile feeders loads	
2.07 Fee	der Selling Cost	=	75.00 \$7.00 500.00 9.00	/feeder miles /loaded mile feeders	
2.07 Fee	der Selling Cost	= = s	75.00 \$7.00 500.00 9.00 500	miles /loaded mile feeders loads feeders	
2.07 Fee	der Selling Cost	= = S	75.00 \$7.00 \$00.00 9.00 500 \$9.45	miles /loaded mile feeders loads feeders /feeder	
2.07 Fee	der Selling Cost Trucking-out	= = s = - - - - -	75.00 \$7.00 \$7.00 500.00 9.00 500 \$9.45 elling Commis \$5.50	miles /loaded mile feeders loads feeders /feeder sion Checkoff Levy	
2.07 Fee	der Selling Cost Trucking-out	= = s : = P, Se +	75.00 \$7.00 \$00.00 9.00 500 \$9.45 elling Commis \$5.50 \$50.76	miles /loaded mile feeders loads feeders /feeder sion Checkoff Levy LPI Insurance Premium	
2.07 Fee	der Selling Cost Trucking-out	= = s + + +	75.00 \$7.00 \$00.00 9.00 500 \$9.45 elling Commis \$5.50 \$50.76 \$20.00	miles /loaded mile feeders loads feeders /feeder sion Checkoff Levy LPI Insurance Premium commission	
2.07 Fee	der Selling Cost Trucking-out	= = s = P, Se + + +	75.00 \$7.00 \$00.00 9.00 500 \$9.45 elling Commis \$5.50 \$50.76 \$20.00 \$1.35	miles /loaded mile feeders loads feeders /feeder sion Checkoff Levy LPI Insurance Premium commission insurance	
2.07 Fee	der Selling Cost Trucking-out	= = s + + +	75.00 \$7.00 \$00.00 9.00 500 \$9.45 elling Commis \$5.50 \$50.76 \$20.00	miles /loaded mile feeders loads feeders /feeder sion Checkoff Levy LPI Insurance Premium commission	
2.07 Fee	der Selling Cost Trucking-out	= = s = P, Se + + +	75.00 \$7.00 \$00.00 9.00 500 \$9.45 elling Commis \$5.50 \$50.76 \$20.00 \$1.35	miles /loaded mile feeders loads feeders /feeder sion Checkoff Levy LPI Insurance Premium commission insurance /feeder	
2.07 Fee	der Selling Cost Trucking-out  Checkoff, WLPI	= = s \$ P, Se + + + + =	75.00 \$7.00 \$00.00 9.00 500 \$9.45 elling Commis \$5.50 \$50.76 \$20.00 \$1.35	miles /loaded mile feeders loads feeders /feeder sion Checkoff Levy LPI Insurance Premium commission insurance	
2.07 Fee	der Selling Cost Trucking-out  Checkoff, WLPI	= = s \$ P, Se + + + + =	75.00 \$7.00 \$00.00 9.00 500 \$9.45 elling Commis \$5.50 \$50.76 \$20.00 \$1.35	miles /loaded mile feeders loads feeders /feeder sion Checkoff Levy LPI Insurance Premium commission insurance /feeder	
	der Selling Cost Trucking-out  Checkoff, WLPI	= = s \$ P, Se + + + + =	75.00 \$7.00 \$00.00 9.00 500 \$9.45 elling Commis \$5.50 \$50.76 \$20.00 \$1.35	miles /loaded mile feeders loads feeders /feeder sion Checkoff Levy LPI Insurance Premium commission insurance /feeder	

				Your Cost
	+	\$2,529.39	maximum value	
	÷	2.0	average	
	=	\$2,410.84		
	<u>X</u>	1.5 <b>\$36.16</b>	% mortality rate /feeder	
		ψ30.10	riccuci	-
2.09 Operating Interest				
		\$2,292.30		
	+	\$180.15	½ of feed & other costs	
	Х	9.00	, 5	
	X ÷	150 365	days on feed 365 days	
	<u>÷</u> =	\$91.45	/feeder	
		•		
B. FIXED COSTS (Pasture)				
Land		2.5	a a v a a /b a a d	
	v	2.5 \$0.00	acres/head \$/acre includes fence	-
	Х <u>Х</u>	2.50	% investment rate	
	=	\$0.00	/feeder	-
Taxes		,		-
		2.5	acres/head	
	<u>X</u> =	\$0.00	\$/acre	
	=	\$0.00	/feeder	
Total	=	\$0.00	/feeder	
		,		
C. LABOUR				
Feedlot		1.00	hours/day feedlot	
	Х	60	days in feedlot	
	÷	500	head	
	<u>X</u> =	\$27.00 \$3.24	\$/hour /feeder	
	_	φ3.24	/leeuei	-
Pasture		0.40	hours/day pasture	
	Х	90	days on pasture	
	÷	500	head	
	<u>x</u>	\$27.00	\$/hour	
	=	\$1.94	/feeder	
Total	=	\$5.18	/feeder	
Total	_	ψ5.10	necuci	-
		Breakeven Ca	lculations	
Operating Costs		¢2 744 06	operating costs	
Operating Costs	_	\$2,744.06 \$2,292.30	operating costs feeder cost	
	÷	φ2,292.30 <u>246</u>	lbs gained weight	
	=	\$1.84	/lb (gain sold)	
Cost per lb of gain sold (shi		-	hb (gain sold)	
Operating & Labour Costs		\$2,749.24	operating costs	
. 3	-	\$2,292.30	feeder cost	
	÷	246	lbs gained weight	
	=	\$1.86	/lb (gain sold)	
On anothing 9 Fire d		<b>#0.744.00</b>	aman Office I costs	
Operating & Fixed		\$2,744.06	oper. & fixed costs	
	÷	\$2,292.30 <u>246</u>	feeder cost <u>lbs gained weight</u>	-
	=	\$1.84	/lb (gain sold)	
		ψ1.0- <b>T</b>	(3 00.0.)	
Total Costs			total costs	

_	\$2,292.30	feeder cost	Your Cost
÷	φ2,292.30 <u>246</u>		
=	\$1.86	/lb (gain sold)	
Operating Costs	\$2,744.06	operating costs	
÷	846	lbs shrunk weight	
=	\$3.24	/lb	
Operating & Labour Costs	\$2,749.24	operating & labour	
÷ =	846 <b>\$3.25</b>	lbs shrunk weight	
-	<b>ψ3.25</b>	ЛU	
Operating & Fixed	\$2,744.06	oper. & fixed costs	
÷ =	846 <b>\$3.24</b>	lbs shrunk weight / <b>Ib</b>	
	•		
Total Costs	\$2,749.24		
÷	846 <b>\$3.25</b>	lbs shrunk weight //b	
	******		
Operating Costs	846	lbs shrunk weight	
x			
=	Ψ=,. σ=σ	income	
Breakeven purchase price (s $\pm$	\$451.76 600	operating less feeder cost lbs purchase weight	
Breakeven purchase price (s $\pm$		/lb	
	0.40		
Operating & Labour Costs	846 \$320.00	lbs shrunk weight \$/cwt selling price	
=		income	
-	\$456.94	operating less feeder cost	
<u>÷</u> =	600 \$3.75	lbs purchase weight //b	
	ψ5.75	/ID	
Operating & Fixed	<b>#</b> 000 00	lbs shrunk weight	
X =		\$/cwt selling price income	
-	\$451.76	op. & fixed less feeder cost	
<u>±</u> =	600	lbs purchase weight	
=	\$3.76	/lb	
Total Costs	846	lbs shrunk weight	
X	•	\$/cwt selling price	
=	\$2,707.20 \$456.94	income total less feeder cost	
- <u>÷</u>	·	lbs purchase weight	
=		/lb	

**April**, 2024

## Contact Us

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   mbfarmbusiness@gov.mb.ca
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