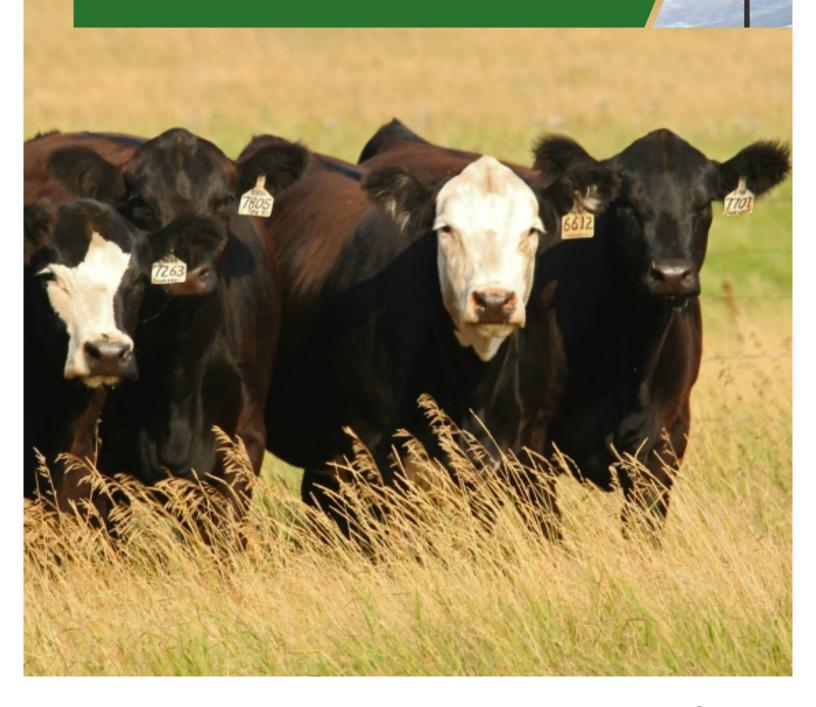
# 2024 Cost of Production Grassing





PLAN ON IT



#### 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:



The Farm Machinery Cost of Production Guide

is also available to help

determine machinery costs.

#### 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 Cost Summary - April, 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 Breakeve	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	
	Cost per lb of	Marginal Returns per hea	d
	<u>gain sold (\$/cwt)</u>	@ \$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)	

**Note**: This budget is only a guide and is not intended to be an in-depth study of the cost of production of this industry. Interpretation and utilization of this information is the responsibility of the user. No liability for decisions based on this publication is assumed.

#### 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	<b>5%</b>	<b>5%</b>
Percent Grasser Weight	Variation	2%	2%

Higher Price (\$ per cwt)	\$336.00
Lower Price (\$ per cwt)	\$304.00
Higher Grasser Weight	862.9
Lower Grasser Weight	829.1

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

Gross Revenue per Grasser	\$2,899.41
Marginal Returns	
Over Operating Costs	\$155.35
Over Operating & Labour Costs	\$150.17
Over Operating & Fixed Costs	\$155.35
Over Total Costs (Net Profit)	\$150.17
Operating Expense Ratio	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%

**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 utilization of this information is the responsibility of the user.

### **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	500	head
Feeder Cattle Mortality Rate (%)	1.5	%
Feeder Purchased Shrunk Weight (lbs)	600	lbs
Feeder Cattle Price (\$/cwt)	\$380	\$/cwt
Finish Weight (lbs)	900	lbs
Percent Shrink (%) - out	6.0%	%
Shrunk Weight (lbs)	846	lbs
Feeder Selling Price	\$320	\$/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	<b>3.00</b> 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 **Trucking in Cost** Average Weight Distance Rate Truck Capacity Number of head per load - calves

#### Yardage: Cost/head/day Initial Chute fee \$/head

#### \$1.00

600 lbs/head 75 miles \$7.00 /loaded mile 54,000 lbs/load 90 per load

> \$0.80 \$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
<b>Trucking Out Cost</b> 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
<b>PASTURE COSTS</b> 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
<b>LABOUR COSTS</b> 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 60 days on ground barley 3.00 lbs/feeder/day Х = 3.75 bushels fed \$5.00 /bu X \$18.75 /feeder = 1.02 Hay days on hay 60 lbs/feeder/day 14.00 Х = 0.38 tonnes fed \$110.00 /tonne <u>X</u> = \$41.90 /feeder 1.03 Salt, Vitamins & Minerals 18.00 lbs/feeder/year \$0.90 /lb <u>X</u> = \$16.20 /feeder **Total Feed Cost** \$76.85 /feeder 2. Other Operating Costs: 2.01 Feeder Cattle Cost Commission \$1.00 \$/cwt 600 lbs/feeder х 100 lbs/cwt ÷ /feeder = \$6.00 Trucking-in 75.00 miles \$7.00 /loaded mile 500 feeders 6 loads 500 feeders ÷ = \$6.30 /feeder lbs/feeder Feeder 600 х \$380.00 \$/cwt ÷ = 100 lbs/cwt \$2,280.00 /feeder **Total Cost** \$2,292.30 /feeder

#### Your Cost

2.02 Yar	dage (includes s	traw,	repairs, util	ities, supplies & deprecia	tion)
	Yardage		\$0.80	cost/head/day	
	Ū	<u>x</u>	60	days on feed	
		= -	\$48.00	/feeder	
	Chute fee	=	\$8.00	/feeder	
	-		• • • •		
	Total Yardage	=	\$56.00	/feeder	
	Ŭ				
2.03 Rer	nted Pasture				
			\$0.90	cost/head/day	
		<u>x</u>	90	days on pasture	
		=	\$81.00	/feeder	
2.04 Pas	sture Checking		<b>*</b> ~~~		
			\$800	cost per year	
		÷ _	500	head	
		=	\$1.60	/feeder	
0.05.1/-4	anin an i Madiaina		mulles		
2.05 Vet	erinary Medicine	& Su		Togging	
			\$0.25	/Tagging /Vitamin	
		+	\$0.00		
		+	\$1.25	/Parasites	
		+	\$0.83	/Blackleg 7 way	
		+	\$3.42	/Growth Implant /Antibiotics	
		+	\$7.00 \$4.00		
		<u>+</u> _	\$4.00	/Vaccine 3 way	
		=	\$16.75	/feeder	
2.06 Ins	urance				
2.00 110			\$2,280.00	feeder cost	
		х	\$0.21	cost/\$100 capital	
			100	/\$100	
		÷ -	\$4.79	/feeder	·
			\$49	additional coverage for lia	bility
		÷	500	feeder cattle	
		<u>+</u> =	\$0.10	/feeder	
	Total	_	<b>F4 00</b>	/feeder	
	Total	=	\$4.89	/feeder	
2.07 Fee	der Selling Cost	s			
	Trucking-out	-	75.00	miles	
	. I doning out		\$7.00	/loaded mile	
			500.00	feeders	
			9.00	loads	
		÷	500	feeders	
		÷	\$9.45	/feeder	
			<i></i>		·
	Checkoff, WLPI	P, Sel	ling Commis		
			\$5.50	Checkoff Levy	
		+	\$50.76	LPI Insurance Premium	
		+	\$20.00	commission	
		<u>+</u>	\$1.35	insurance	
		=	\$77.61	/feeder	
	Tetel	_	<b>#07.00</b>	/feeder	
	Total	=	\$87.06	/feeder	

2.08 Death Loss

· · ·		\$2,292.30	feeder cattle cost	Your Cost
	+	\$2,529.39	maximum value	
	÷	2.0	average	
	= <u>x</u>	\$2,410.84 1.5	average value % mortality rate	
	_ =	\$36.16	/feeder	
2.09 Operating Interest				
		\$2,292.30	feeder cost	
	+	\$180.15	<sup>1</sup> / <sub>2</sub> of feed & other costs	
	X X	9.00 150	% operating interest days on feed	
	÷	365	365 days	
	=	\$91.45	/feeder	
B. FIXED COSTS (Pasture) Land		2.5	acres/head	
	х	2.5 \$0.00	\$/acre includes fence	
	x	2.50	% investment rate	
	=	\$0.00	/feeder	
Taxes				
		2.5	acres/head	
	<u>×</u> =	\$0.00	\$/acre	
	=	\$0.00	/feeder	
Total	=	\$0.00	/feeder	
		<b>+</b>		
C. LABOUR				
Feedlot		1.00	hours/day feedlot	
	Х	60	days in feedlot	
	÷	500	head ¢/bour	
	<u>×</u> =	\$27.00 \$3.24	\$/hour /feeder	
		ψ0.24		
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	
10141		<b>40</b> 0	100001	
		Breakeven Ca	lculations	
Operating Costs		\$2,744.06	operating costs	
	-	\$2,292.30	feeder cost	
	÷	<u>246</u>	Ibs gained weight	
Cost per lb of gain sold (shr	= runk	\$1.84	/lb (gain sold)	
Operating & Labour Costs	unk	\$2,749.24	operating costs	
eporating a Labour 00315	-	\$2,292.30	feeder cost	
	÷	<u>246</u>	Ibs gained weight	
	=	\$1.86	/lb (gain sold)	
•		<b>.</b>		
Operating & Fixed		\$2,744.06	oper. & fixed costs	
	-	\$2,292.30	feeder cost	
	÷	<u>246</u> <b>\$1.84</b>	<u>lbs gained weight</u> / <b>Ib (gain sold)</b>	
	-	φ1.04		·

Your Cost

Total Costs - ÷	<u>246</u> <b>\$1.86</b>	/lb (gain sold)	
Operating Costs ÷ =	<u></u>	operating costs <u>lbs shrunk weight</u> /lb	
Operating & Labour Costs ÷ =		operating & labour <u>lbs shrunk weight</u> / <b>lb</b>	
Operating & Fixed ÷ =		oper. & fixed costs <u>lbs shrunk weight</u> / <b>lb</b>	
Total Costs ÷ =			
	846 x \$320.00 = \$2,707.20 - \$451.76	lbs shrunk weight \$/cwt selling price income operating less feeder cost	
	<u>+ 600</u> = <b>\$3.76</b>	lbs purchase weight /Ib	
	846 x \$320.00 = \$2,707.20 - \$456.94 <u>÷</u> <u>600</u> = <b>\$3.75</b>	lbs shrunk weight \$/cwt selling price income operating less feeder cost <u>lbs purchase weight</u> / <b>lb</b>	
:	x \$320.00 = \$2,707.20 - \$451.76 <u>÷ 600</u> = <b>\$3.76</b>	lbs shrunk weight \$/cwt selling price income op. & fixed less feeder cost <u>lbs purchase weight</u> / <b>lb</b>	
	846 x \$320.00 = \$2,707.20 - \$456.94 <u>÷ 600</u> = <b>\$3.75</b>	lbs shrunk weight \$/cwt selling price income total less feeder cost <u>lbs purchase weight</u> / <b>lb</b>	

#### Contact Us

For more information, contact a Farm Management Specialist.

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

## **Contact us**

- For more information, contact a Farm Management Specialist
- manitoba.ca/agriculture
- mbfarmbusiness@gov.mb.ca
- 1-844-769-6224